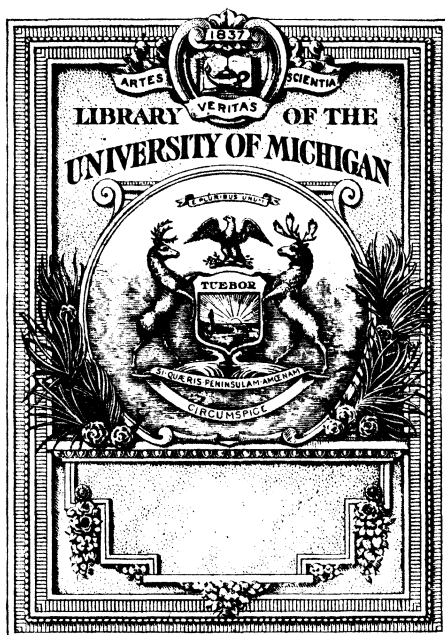


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REPORT
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SPECIAL NOTICE.

THE matter contained herein comprises the entire Philippine Commission Report for the year ended June 30, 1913, as printed in the United States.

ANNUAL REPORTS, WAR DEPARTMENT

FISCAL YEAR ENDED JUNE 30, 1913

U.S.
REPORT OF THE
PHILIPPINE COMMISSION

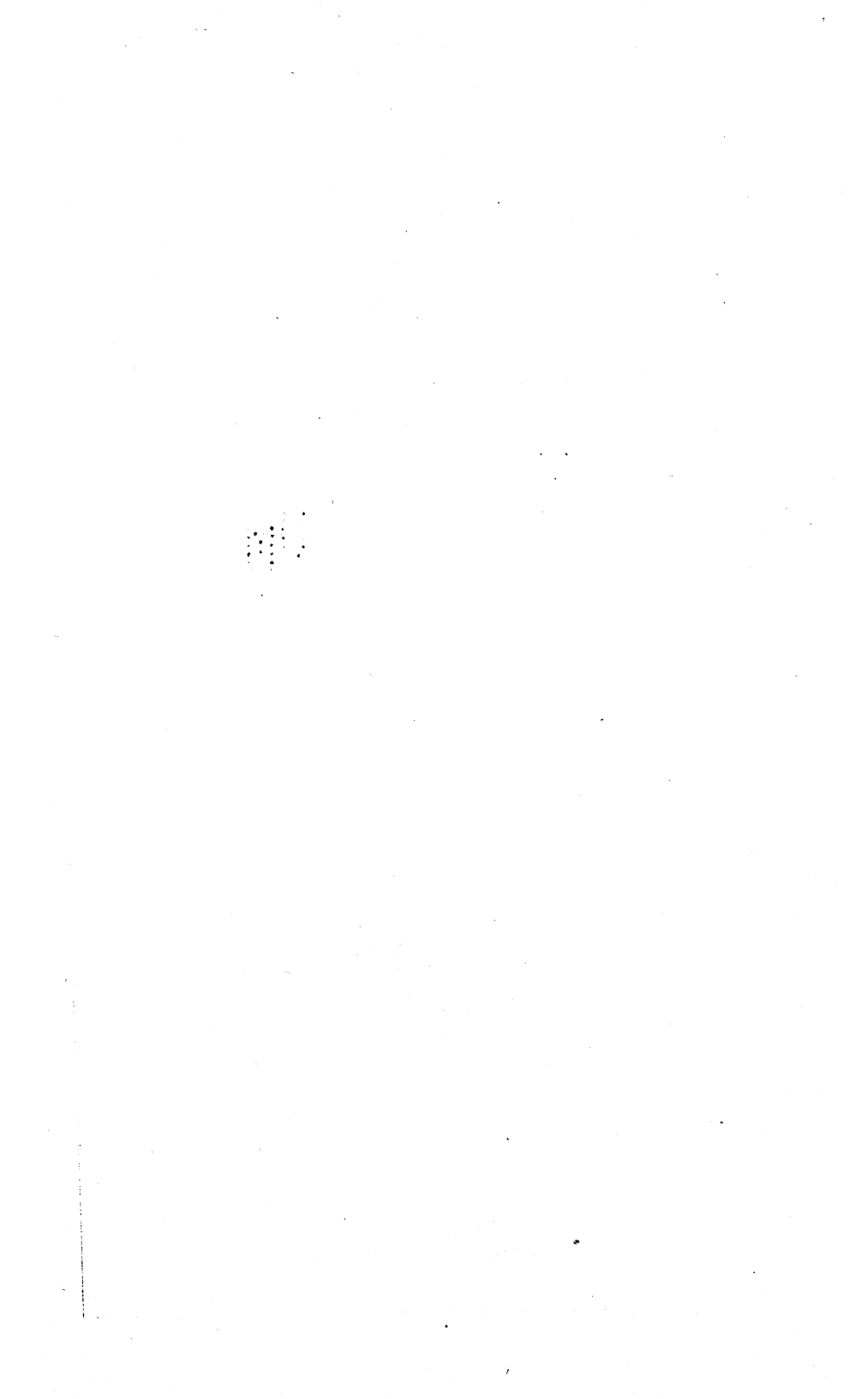
TO THE SECRETARY OF WAR

1913

(IN ONE PART)



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1914



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REPORT OF THE PHILIPPINE COMMISSION.



ANNUAL REPORT OF THE PHILIPPINE COMMISSION TO THE SECRETARY OF WAR.

MANILA, *September 30, 1913.*

SIR: The Philippine Commission has the honor to submit its fourteenth annual report, which covers the fiscal year ending June 30, 1913.

LEGISLATION.

EXCLUSIVE LEGISLATIVE JURISDICTION OF THE COMMISSION.

Acting within its exclusive legislative jurisdiction over all that part of the Philippine Islands inhabited by Moros or other non-Christian tribes, the Commission enacted during the fiscal year 23 laws, of which the following are the more important:

An act making immediately available the sum of fifty-seven thousand pesos of the amount appropriated by act numbered twenty-one hundred and eighty-five for the construction of wireless telegraph stations in that part of the Philippine Islands inhabited by Moros or other non-Christian tribes.

An act prohibiting, in the territory inhabited by Moros or other non-Christian tribes, the forcing, compelling, or obliging of any laborer or other employe to purchase merchandise, commodities, or personal property under certain conditions.

An act providing an additional associate judge of the court of land registration for the Moro Province, the Mountain Province, the province of Agusan, and the province of Nueva Vizcaya, and for other purposes.

An act authorizing the municipality of Zamboanga to incur an indebtedness of one hundred and fifteen thousand dollars in money of the United States, and to issue bonds covering the amount of said indebtedness, payable in gold coin of the United States, for the purpose of providing funds to construct necessary sewer and drainage facilities, to secure a sufficient supply of water and necessary buildings for primary public schools in said municipality, pursuant to the provisions of sections sixty-six, sixty-seven, sixty-eight, and sixty-nine of the act of Congress approved July first, nineteen hundred and two, entitled "An act temporarily to provide for the administration of the affairs of civil government in the Philippine Islands, and for other purposes," as amended.

An act to authorize the Governor General to grant to the authorities of the United States Army in the Philippine Islands the privilege of using the current of the Bued River for the purpose of operating a hydroelectric plant and a pumping station, and for other purposes.

AS A CHAMBER OF THE PHILIPPINE LEGISLATURE.

The first regular session of the Third Philippine Legislature convened on October 16, 1912, and continued in session until and including February 3, 1913. A special session was called by proclamation of the Governor General for the days February 6 to 11, inclusive. These were the only sessions of the Legislature held during the fiscal year.

During these sessions there originated in the Commission as a chamber of the Philippine Legislature 71 bills, of which 61 were passed by the Commission and sent to the Assembly. The Commission considered and acted on 131 bills of the Assembly. The total

number of bills finally agreed upon by both Houses and enacted into law was 69, of which 18 originated in the Commission, and 51 in the Assembly. Of these laws the following are the more important:

An act appropriating the sum of fifty thousand pesos, Philippine currency, out of any funds in the insular treasury not otherwise appropriated, for the extermination of locusts in accordance with the provisions of act numbered twenty-one hundred and twenty-one.

An act providing that the assessment of, and tax on, real and personal property shall not include machinery as herein defined.

An act to afford relief to sufferers from the typhoons of October and November, nineteen hundred and twelve.

An act further to amend section thirty-three, chapter four of act numbered nine hundred and twenty-six, entitled "The public land act," as amended, by providing for the granting of free patents to native settlers until January first, nineteen hundred and twenty-three.

An act appropriating the sum of two hundred thousand pesos, Philippine currency, for the purchase of the library of the Compañía General de Tabacos de Filipinas at Barcelona, Spain, under certain conditions.

An act to provide for an exposition of Philippine products in the city of Manila in the year nineteen hundred and fourteen.

An act appropriating funds for the Philippine Exposition.

An act to establish stations for practical instruction in matters concerning agriculture and a system of agricultural demonstration and development.

An act authorizing certain measures for improving the planting, curing, and preparation of tobacco.

An act authorizing the investment of a portion of the surplus remaining from the sale of the friar lands bonds in the purchase of certain additional friar lands, situated in the municipalities of Biñan and Santa Rosa, province of Laguna.

An act providing for the registration of patents and patent rights in the Philippine Islands, and for the protection of the same.

An act providing for the increase of the pay of the privates and members of the band of the Philippine Constabulary, and for other purposes.

An act to provide for the revision and correction of land-tax assessments, the valuation of newly declared real property for the purposes of taxation, and for other purposes.

An act amending section twelve of act numbered one hundred and ninety, as amended, by providing that until January first, nineteen hundred and twenty, both English and Spanish shall be official languages, and for other purposes.

An act to provide for the record of mortgages or trust deeds issued by public service corporations to secure bonds, and for other purposes.

An act to regulate the practice of veterinary medicine and surgery in the Philippine Islands.

An act giving to the Governor General in behalf of the government of the Philippine Islands and to municipalities and provinces the right to acquire for public use real property of private ownership by condemnation under judicial process and conferring on courts of first instance exclusive original jurisdiction thereof, and for other purposes.

An act appropriating the sum of four hundred thousand pesos for the establishment of colonies and plantations for the cultivation of rice and other food cereals, for the better distribution of the population of these islands, and for other purposes.

An act prohibiting manufacture, possession, and sale of dynamite and other explosives without a special permit, providing a penalty therefor, and for other purposes.

An act amending sections forty-six, forty-seven, fifty, fifty-seven, seventy-five, and seventy-six, of act numbered one hundred and eighty-three, entitled, "An act to incorporate the city of Manila," and adding at the end thereof a new section numbered eighty-nine; by providing that the rate of the annual tax on the assessed value of real estate for the city of Manila shall be one and one-half per cent; enlarging the powers of the city assessor and collector in the matter of the assessment and collection of said tax; providing for the assessment and collection of special taxes for public improvements, and for other purposes.

An act providing certain special proceedings for the settlement and adjudication of land titles.

A variety of important matters were considered by the Legislature, but failed of final passage; of these the following originated in the Commission:

An act authorizing the Secretary of Commerce and Police with the approval of the Governor General to contract with any railroad company in the Philippine Islands for

the construction and maintenance of joint railroad and highway bridges on its lines of railroad, appropriating the sum of five hundred thousand pesos to pay the government's proportion of the cost of construction and maintenance of the bridges so contracted for, and providing for the apportionment by the Governor General of the expense of maintenance of such bridges between the provinces and municipalities concerned.

An act creating the office of shipping commissioner, defining his duties, regulating the shipment and discharge of seamen in domestic vessels and the adjudication of wage disputes in certain cases.

An act creating the crime of habitual criminality and providing punishment for the same.

An act prohibiting slavery, involuntary servitude, peonage, and the sale or purchase of human beings in the Philippine Islands, and providing punishment therefor.

An act to prohibit the introduction into the Philippine Islands and the manufacture, sale, or public exhibition therein of moving-picture films or of pictures of immoral, indecent, obscene, vicious, or a disorderly character or tendency.

An act prescribing the manner in which municipal councils shall grant the privilege of running cockpits; providing for a license tax for fighting cocks; prohibiting women, children, and public officers from entering cockpits, and for other purposes.

An act to amend the municipal code by requiring municipal councils to regulate or to prohibit the maintenance of dance halls, and to amend the charter of the city of Manila by giving the municipal board power to regulate, license, fix the location of, or prohibit the same.

The following originated in the Assembly:

An act authorizing the appointment of a board for the development and promotion of agriculture.

An act reestablishing the office of provincial engineer and amending the provincial government act and its amendments.

An act amending act numbered fourteen hundred and fifty-nine, known as the corporation law, by adding a chapter on agricultural credit associations.

An act providing for the adoption of military instruction in the public schools of the Philippine Islands

An act establishing an asylum for orphans, invalids, and old persons, and providing funds for the organization and operation thereof, and for other purposes.

An act to create rural guards in all the municipalities organized under act numbered eighty-two, and for other purposes.

An act authorizing the creation of provincial banks under certain conditions and limitations, and for other purposes.

An act regulating the manner of acquiring and recovering Philippine citizenship.

An act appropriating funds for the erection and maintenance in the city of Manila of a tuberculosis hospital and for the improvement of the attendance and treatment of the insane confined in the San Lazaro Hospital and the Hospicio de San José, in the discretion of the director of health.

An act providing for an increase of the municipal school funds.

An act to promote workmen's wards [sanitary villages or districts].

The acts passed by the Commission and the Legislature during the fiscal year are numbered 2188 to 2279. Certified printed copies of all of these have heretofore been furnished.

The Legislature having failed to pass the appropriations for the current expenses of the government for the fiscal year 1914, section 7 of the act of Congress of July 1, 1902, became operative, and the expenses necessary for the support of the government are being paid in accordance with the provisions of said section.

CONDITION OF TRADE.

The total volume of the trade of the islands for the year just closed shows a satisfactory development, though its rate of increase for the first months of the year was not quite maintained toward the last. This was mainly due to an extensive falling off in the importation of rice, which amounted to but \$7,940,857, as against \$10,569,949 for the preceding year—a decrease of nearly 25 per cent. This decrease

in the importations of the principal cereal food of the country is not in itself unwelcome, for it means an immense saving to the population at large. It is directly traceable to the particularly abundant crop at the last harvest, which marked the end of the disastrous shortage following the severe drought of 1911-12.

Our foreign trade increased from \$104,869,816 to \$110,010,859, or a trifle less than 5 per cent. The increase in imports from \$54,549,980 to \$56,327,533 was only about $3\frac{1}{4}$ per cent; but if rice, the only item which showed a great decrease, be excluded, the increases in imports and exports, the latter from \$50,319,836 to \$53,683,326, were about the same, 8 and 7 per cent, respectively. The imports of rice this year formed about the same percentage of the total imports that they formed every year from 1905 to 1910—that is, during the years when the local supply was normal.

Apart from rice there were increases in most classes of merchandise imported, though meat and dairy products showed a small decrease, and importations of live cattle continued to fall off as a result of the necessary application of strict quarantines against animal diseases. There was an increase of 24 per cent in cotton goods, of which goods the United States this year supplied 59 per cent, as against about $7\frac{1}{2}$ per cent in 1908 and 1909. Such proof of the stimulation of American trade with the islands by the removal of the former restrictions seems to require no comment. Imports of iron and steel products increased 9 per cent. More than four-fifths of this increase was accounted for by imports of machinery, which formed 40 per cent of the total, more than a third of which was in sugar machinery alone; of this last more than a half came from the United States and Hawaii. Other imports which showed considerable gain were flour, illuminating oil, leather goods, chemicals, drugs and dyes, vegetable fibers, fish and fish products, coal and cement. Except in the last two, the United States figured exclusively or largely in these increases.

The bulk of the exports from the Philippines continued to be the four staple agricultural products, manila hemp, copra, sugar, and manufactured tobacco. The exports of hemp during the year decreased in quantity, but increased in value 42 per cent. This increase restored hemp to first place among exports, from which it had been ousted by copra in 1912. So great a relative increase in values of exports was of course coincident with a large rise in average price, which was \$105 per ton for 1912, but \$159 for 1913. Some authorities believed at the time that this increase was largely speculative, and it was certainly not maintained at its highest level for any length of time. From \$226 per ton in February of this year it fell to \$152 in June and to less than \$120 in July. The prices, however, have still remained high enough to make it fairly safe to say that the recovery from the extremely depressed condition of the trade which reached its worst phase in 1911 and 1912 is more than merely temporary.

Exports of copra and sugar both fell off materially, the former by 30 per cent in value and more than that in quantity; the latter increased in quantity but decreased 9 per cent in value. In the case of copra this heavy loss was coincident with a general rise in price. It seems safe to say, therefore, that the difficulty was a shortage in supply rather than in demand, and this is confirmed by what is known

of the damage done to the coconut plantations in the last two years by typhoons and drought. The decrease was greatest in the case of exports to the United States, amounting to more than two-thirds both in quantity and value and, as importers there appeared unwilling to meet the increase in price referred to, which had gone on steadily until the average for last year was more than twice that for 1903, it seems uncertain how quickly this branch of trade, which appeared so promising last year, will be restored. Due to the poor quality of our sugar, its price fell very materially, though it was still better than for any year prior to 1909. In the case of this commodity also, the decrease showed itself especially in the shipments to the United States, which fell off nearly a half in quantity and more than a half in value.

The exports of all classes of tobacco manufactures showed satisfactory increases during the year. The shipments of cigars increased 19 per cent in number and 25 per cent in value. This seems to indicate a complete recovery from the slump of 1911, which came from an overexpansion following the tariff act of 1909. The record of 1910, 196,000,000, which was closely approached in 1912, was this year exceeded, the figure being 207,000,000. This increase was in large part absorbed by the United States, whose purchases increased 41 per cent in quantity and 36 per cent in value. The average price of exported cigars was the highest yet recorded, although the prices of those shipped to the United States, while still far higher than for any year prior to 1910, decreased slightly from last year. There is, however, a strong local conviction that, despite the continued improvement in price, the Philippine exporters are not securing the return that the quality of their product merits. Exports of cigarettes have never been relatively important, though they increased largely during the past year. Shipments of unmanufactured tobacco, mainly leaf, increased moderately, but, as in previous years, the share of the United States in this item was negligible.

A few points of interest are to be noted in connection with the exports of commodities other than these great staples. Shipments of coconut oil rose from almost nothing during the preceding year to the respectable figure of \$315,513. It is highly desirable that the freight cost on exports should be decreased, and some of the available profit kept in the country, by developing the manufacture of certain products derived from the great agricultural staples of the islands. The manufacture of cordage, another such industry, has also made a fair start. Exports of the products of household industries of the islands, which first became noticeable the last two or three years ago, did not for the most part make a very good showing during the year; shipments of embroideries increased, but those of native cloths, knotted hemp, and hats declined. In making knotted hemp into braid the islands have not been able to compete with Japan. Exports of maguey and lumber increased heavily; the latter, which should, when the valuable forests of the islands have been developed to approximately the full extent of their productivity, form a very important item, have marked a gain of more than 200 per cent. Exports of such agricultural products as cacao and numerous varieties of fruits, for the growth of which the Philippines are eminently adapted, remain negligible. Exports of gold bullion from Philippine

mines are not included in the above total. First appearing in 1912, they reached a value of \$77,849; during the past year this was increased nearly tenfold to \$729,503.

In the distribution of Philippine trade among the various countries dealt with, the United States continues to maintain the primacy which she naturally gained with the establishment of free trade in 1909. Her share of the total trade for the past year was \$45,617,517, or 41.5 per cent. This is a larger percentage than for any year except 1911, when it reached a slightly higher figure. Her share of the imports amounting to 45.5 per cent of the total was relatively greater, because of large increases in the importations of American cottons, iron and steel, flour, and boots and shoes. Exports to the United States, on the other hand, fell off 7.6 per cent in amount and formed a relatively low percentage of the total exports, 37.2, although it was still greater than for every year prior to 1910 except two. This falling off was due to smaller purchases of sugar and copra. The total trade with Great Britain, which stood second on the list, increased moderately, while that with France decreased somewhat. The rice-producing countries lost relatively, though the French East Indies still stood second on the export list.

COMMERCIAL AND BUSINESS STATISTICS.

The tables which were given in the annual report of the Commission for 1912, showing, as evidence of commercial and financial activity, the total trade of the islands and the mercantile, manufacturing, and common carrying business on which is levied an internal-revenue tax of one-third of 1 per cent, may be brought to date as follows:

Foreign commerce.

Fiscal year.	Trade with foreign countries.	Trade with the United States.	Total trade.
1909.....	P87,772,324	P29,905,556	P117,677,880
1910.....	94,387,348	59,183,832	153,571,180
1911.....	105,959,292	73,265,410	179,224,702
1912.....	126,959,185	82,780,444	209,739,632
1913.....	128,786,684	91,235,034	220,021,718

Business upon which internal-revenue percentage tax is levied.

Fiscal year.	Amount of business.
1909.....	P380,408,894
1910.....	457,610,200
1911.....	533,650,738
1912.....	574,168,706
1913.....	671,685,704

The foreign trade of the islands has increased in a period of four years nearly nine-tenths, while the domestic business, for which figures are here given, and which is the best index now available of the movement of commercial prosperity in the country at large, increased by nearly four-fifths. A small portion of this latter increase was due to improved methods of collection.

The favorable state of affairs which had been noticeable up to the end of the last fiscal year in regard to the customs receipts, in spite of the effect of the tariff of 1909 establishing free trade with the United States, ceased to exist during the year just past. The amount and causes of the decrease in this item of revenue are referred to in the report of the Governor General.

FINANCES.

For a statement of the financial condition of the government attention is respectfully invited to the report of the auditor for the Philippine Islands, where all details may be found.

RECOMMENDATIONS.

We wish to renew the recommendations for legislation by Congress appearing on pages 11 to 13 of the report of the Commission for the fiscal year ending June 30, 1912.

A number of other matters which come within the scope of the Commission's labors, or have been brought to its attention from time to time, are also treated of in the report of the Governor General, to which the Commission respectfully invites attention.

Respectfully submitted.

NEWTON W. GILBERT.

GREGORIA ARANETA.

RAFAEL PALMA.

JUAN SUMULONG.

FRANK A. BRANAGAN.

To the honorable the SECRETARY OF WAR,
Washington, D. C.

REPORT OF THE GOVERNOR GENERAL.

MANILA, *September 25, 1913.*

GENTLEMEN: I have the honor to present to the Philippine Commission the following report of the Governor General. Except where otherwise stated, this report relates to the fiscal year 1913, ending June 30, 1913.

The undersigned performed the duties of this office as Acting Governor General during the first half of the year and until the return from leave of the Governor General, W. Cameron Forbes, on January 18, 1913. Gov. Forbes held office through the remainder of the year, but later submitted his resignation, effective September 1, 1913; and, pending the arrival in the islands of his successor, Hon. Francis Burton Harrison, who assumed office in Washington on September 2, the undersigned again took up the duties of the position as Acting Governor General, and in that capacity renders this report.

THIRD PHILIPPINE LEGISLATURE.

The first regular session of the Third Philippine Legislature was held in Manila, beginning October 16, 1912, and ending February 3, 1913. A special session was convened at Manila, pursuant to the proclamation of the Governor General, on February 6, and remained in session until midnight February 11.

FINANCES.

At the beginning of the fiscal year 1913 the total resources of the government amounted to ₱16,966,039.52, as compared with ₱17,180,112.94 at the beginning of the preceding year—a decrease of ₱214,073.42. Of this amount ₱1,404,689.95 was represented by cash available for appropriation, a sum more than twice as great as the corresponding sum at the beginning of the fiscal year 1912. In addition to this there was an amount of ₱1,681,038.88 in the form of cash appropriated for public improvements, but not yet released by the Governor General. The unexpended balance of appropriations from revenue amounted to ₱4,501,535.18 in cash, ₱5,314,688.06 in supplies, and ₱3,784,529.32 in investments and accounts receivable—a total of ₱13,600,752.56. There was also an unexpended balance of appropriations from the public works and improvements bond fund of ₱279,558.13. At the end of the fiscal year 1913 the total resources amounted to ₱14,392,097.82, as compared with ₱16,966,039.52 at the end of the fiscal year 1912. The cash surplus available for appropriation had increased to ₱1,652,980.56. The unexpended balance of appropriations from revenue in all forms amounted to ₱12,429,186.06. The cash appropriated for public improvements but not yet released by the Governor General amounted

to ₱148,053.61, and the unexpended balance of appropriations from the bond fund amounted to ₱161,877.59.

Revenues and receipts.—The total revenues and receipts of the government during the fiscal year 1913 amounted to ₱26,979,400.64, as against ₱31,131,618.91 for the preceding year. This decrease was entirely accounted for by the falling off in the net customs revenue, amounting to ₱2,266,357.81, and in the surplus of the gold standard fund available for appropriation under Act No. 2083, a decrease of ₱2,507,489.61. The items of franchise taxes and miscellaneous receipts remained about the same, while the insular share of the internal revenue showed an increase of ₱629,041.62.

Customs revenue.—The falling off in the customs revenue just referred to is for the most part the result of two causes: First, the great decrease in the importations of rice, and, second, the great relative gain in the proportion of the total imports received from the United States, which, under the tariff act of 1909, pay no duty. At the time of the passage of the tariff act it was assumed that there would be a decrease in the customs revenue from this cause, but the stimulation which the establishment of free trade with the United States gave to the commerce of the islands in general during the next two or three years caused the decrease in revenue from that portion of the imports received from the United States to be offset by the increase in the revenue from the expanded trade with countries other than the United States. Sooner or later, however, this transference of the import trade from foreign countries to the United States, on whose goods no duties are collected, was bound to affect the customs revenue of the islands; and during the fiscal year just closed this natural course of events was accelerated by the situation in regard to the importations of rice, the causes of which are discussed in the report of the Philippine Commission. It may be repeated here that the rice imported into the islands fell off in quantity from 260,249 metric tons in 1912 to 179,204 metric tons in 1913, and in value from ₱21,569,949 in 1912 to ₱15,881,714 in 1913; and that this caused a falling off in the duties collected from ₱5,204,984 to ₱3,585,964, a decrease in this item alone of ₱1,621,020, or about three-fourths of the total decrease in customs revenue. The figuring of that portion of the decrease specifically due to the transfer of import trade from foreign countries to the United States is a more complicated matter, but when it is stated that the imports from the United States increased during the fiscal year 1913 by ₱9,710,884, as against an increase of ₱3,555,106 in the imports from all countries, including the United States, it is easy to see what the total effect upon the customs revenue must have been. The falling off in the import duties accounted for practically the whole of the total decrease in customs duties. There were very slight decreases in export duties and the wharfage tax, while most of the miscellaneous collections showed increases.

Internal revenue.—The increases in the various items of internal revenue and other matters pertaining to them are discussed in the report of the secretary of finance and justice. The total increase in the insular share amounted, as stated above, to ₱629,041.62.

Gold standard fund surplus.—The decrease in the surplus of the gold standard fund available for appropriation under Act No. 2083, referred to above, was, of course, due to the fact that the available

surplus in 1912, in the course of which fiscal year the act in question was passed, included the accumulated surplus of a number of years, whereas, in 1913 the surplus of that year alone was available.

The total fund available for the fiscal year, including resources at the beginning of the year, revenues and receipts, and the small item of supplies brought into account, amounted to ₱44,000,180.36, as compared with ₱48,311,731.85 for the fiscal year 1912.

Expenditures.—The total expenditures of the insular government for the fiscal year amounted to ₱29,608,082.54, as compared with ₱30,092,707.02 for the fiscal year 1912. Of this ₱19,120,175 was expended for the current expenses of the insular government; ₱2,194,284.92 was expended in the form of aid to cities, provinces, and municipalities, including the insular contribution to the expenses of the city of Manila; ₱688,086.41 was for interest and sinking fund payments on the bonded indebtedness of the insular government; ₱620,661.45 was for interest on railroad bonds under the guaranty contracts; and ₱6,984,874.76 was for public improvements.

Guaranteed railroad bonds.—As stated above, the expenditures of the insular government on account of interest on guaranteed bonds of railroad companies during the fiscal year just closed was ₱620,661.45, an increase of ₱95,238.76 over the amount for the preceding year. This increase in payments was mainly due to the falling off in the earnings of the Philippine Railway Co., owing to the severe damage wrought by typhoons in the provinces traversed by its lines in October and November, 1912, further referred to in another part of this report. During the year certificates for the issuance of bonds on the guaranteed southern lines of the Manila Railroad Co. were made in the amount of ₱2,750,000 which, added to the ₱9,972,000 authorized in previous fiscal years, makes a total of ₱12,622,000. These bonds have been issued on the cost of 275 kilometers (171 miles) of line, all in full commercial operation. There have been paid out on these bonds by the government of the Philippine Islands to the end of the fiscal year 1913 the sum of ₱888,777.78 of which all but ₱33,867.01 has been refunded by the company from net earnings. Certificates for the final issuance of bonds for the lines of the Philippine Railway Co. had not been made at the end of the fiscal year, but this was subsequently accomplished prior to the preparation of this report. In the course of the fiscal year, bonds of this company were authorized in the amount of ₱322,000, which, added to the ₱16,764,000 previously issued, made a total of ₱17,086,000. At the end of the fiscal year 1913 the government of the Philippine Islands had paid out in interest on the bonds of this company, not including the cost of exchange, ₱2,917,910.46, and there had been refunded by the company ₱111,393.67, leaving a balance due the government of ₱2,806,516.79.

Public improvements.—As stated above there was available at the beginning of the fiscal year the sum of ₱1,681,038.88 in cash appropriated for public improvements, but not yet released by the Governor General, and also appropriations from the public works and improvements bond fund amounting to ₱279,558.13. In the course of the year there was expended by the insular government on public improvements ₱4,465,037.12 for insular public works, and ₱2,402,157.10 in the form of allotments to provinces and municipalities; making a total of expenditures on public improvements from revenue

funds of ₱6,867,194.22. In addition to this there was expended for insular public works from the bond fund ₱117,680.54, making the total of insular expenditures on the public improvements mentioned of ₱6,984,874.76. At the end of the year the amount in cash appropriated for public improvements but not yet released was ₱148,053.61, while the appropriations available from the public works and improvements bond fund were ₱161,877.59.

The following is a financial statement of the insular government for the fiscal year 1913:

Resources at the beginning of the fiscal year:	
Cash available for appropriation.....	₱1,404,689.95
Cash appropriated for public improvements, but not yet released by the Governor General.....	1,681,038.88
Total.....	3,085,728.83
Balances of appropriations from revenue—	
Cash.....	4,501,535.18
Supplies.....	5,314,688.06
All other.....	3,784,529.32
Balances of appropriations from bond fund—cash.....	279,558.13
Total resources at beginning of fiscal year.....	16,966,039.52
Revenues and receipts:	
Customs revenue.....	15,549,889.47
Internal revenue.....	10,088,462.95
Franchise tax.....	119,637.66
Surplus gold standard fund, Act No. 2083.....	889,538.04
All other receipts.....	331,872.52
Total revenues and receipts.....	26,979,400.64
Supplies brought into account.....	54,740.20
Total available for the year.....	44,000,180.36
Expenditures:	
Current expenses of the insular government.....	19,120,175.00
Aid to cities, provinces, and municipalities.....	2,194,284.92
Interest and sinking fund payments, bonded debt.....	688,086.41
Interest on railroad bonds, guaranty contracts.....	620,661.45
Public improvements—	
Insular.....	4,465,037.12
Allotments to provinces and municipalities.....	2,402,157.10
Total from revenue funds.....	6,867,194.22
Insular from bond fund.....	117,680.54
Total for public improvements.....	6,984,874.76
Total expenditures.....	29,608,082.54
Resources at the end of the fiscal year:	
Cash available for appropriation.....	1,652,980.56
Cash appropriated for public improvements, but not yet released by the Governor General.....	148,053.61
Total.....	1,801,034.17
Balance of appropriations from revenue—	
Cash.....	4,555,363.51
Supplies.....	5,222,952.39
All other.....	2,650,870.16
Balance of appropriations from bond fund, cash.....	161,877.59
Total resources at end of fiscal year.....	14,392,097.82

ALLOTMENT FOR CURRENT EXPENSES OF THE GOVERNMENT.

The Legislature having failed to make provision, by an appropriation act, for the current expenses of the government for the fiscal year 1913, it was found necessary, as stated in the last annual report of the Governor General, to rely on the provisions contained in section 7 of the act of Congress of July 1, 1902, which states that "if, at the termination of any session, the appropriations necessary for the support of government shall not have been made, an amount equal to the sums appropriated in the last appropriation bills for such purposes shall be deemed to be appropriated; and until the Legislature shall act in such behalf the treasurer may, with the advice of the Governor, make the payments necessary for the purposes aforesaid."

The form of action taken was the same as in previous years, no changes being made in the amounts appropriated by Act No. 1989, the last general appropriation act passed by the Legislature, except to provide for slight adjustments of personnel, in accordance with the provisions of the civil-service act, or under the general authority given by the act of Congress of July 1, 1902. The total amount available for allotment under the provisions of Act No. 1989 and certain other acts making appropriations which were also subject to reallocation under the provisions of the act of Congress quoted above, was ₱17,695,788. Of this there was allotted for the expenses of the fiscal year 1913 ₱17,250,993. In addition to this allotment there was available for the Judiciary ₱500,000, and for the Bureaus of Customs and Internal Revenue each ₱100,000, which were restored from funds reverted by these bureaus to the general fund in previous years. These restorations, together with transfers of funds and minor additions to the allotment, brought the amount actually available for expenditure during the fiscal year to a total of ₱18,527,466.85.

The Third Legislature at its first regular and special sessions, 1912-13, again failed to pass an appropriation bill for the current expenses of the ensuing fiscal year, 1914. The Governor General, therefore, on July 1, 1913, signed a letter of allotment drafted on the same general lines as that of the year previous. The total distributed was ₱17,464,596.

PUBLIC ORDER.

Conditions of public order are discussed in detail in the report of the secretary of commerce and police, and it is sufficient to say here that, except for the coming to a head about the end of the year of the long threatened trouble with the disorderly element of a portion of the Moros of the islands of Jolo, the state of affairs throughout the islands in this regard is and has been satisfactory. Conditions in Mindanao and the Moro Province as a whole have greatly improved. The district of Lanao, in which, together with Jolo, the situation has been the most difficult to cope with during the past few years, has now been brought completely under peaceable control, and the state of public order there is better than at any time previous under American occupation. This is of the first importance, as the district is one of the healthiest, as well as one of the most fertile and picturesque in the islands.

In Jolo the authorities of the Moro Province, with the invaluable cooperation of the United States Army and the constabulary, were engaged throughout the year in carrying out the disarmament of the Moro population. Such opposition as was encountered centered in a small portion of the island known as Lati Ward. The trouble which threatened in this locality during the fiscal year 1912 did not come immediately to a head; conditions, nevertheless, were far from satisfactory. The population, influenced by the disorderly element, when it appeared that movements of troops were to be made, stampeded to the number of several thousand, including women and children, to Mount Bagsak. Knowing that the authorities would hesitate to attack under these conditions, they flatly declined to surrender individual criminals or arms. Finally, after a long period of negotiations and maneuvering, advantage was taken of a time when all but a defiant minority, including practically all the non-combatants, had left the stronghold, and the latter was on the morning of June 11, 1913, carried by a surprise attack of a force of American troops and Scouts, with very slight loss to the attacking party, every unit of which behaved with the greatest gallantry. Since then most of the remnants of the malcontents who escaped have been killed or captured, and it is hoped that a final blow has been struck at the outlaw element of Jolo. If this proves to be the case, the result, taken in connection with the success of the disarmament operations, will be the establishment of peaceful conditions through the whole of the Moro Province. When these prevail it is expected that the local constabulary will be sufficient for the necessary police work, and that American troops will be needed only, as in other parts of the islands, for the moral effect of their presence and for a reserve in cases of emergency.

LABOR CONDITIONS.

With the exception of one considerable strike among the cigar makers in Manila, which was entirely free from any disturbance of public order, labor conditions during the past year have been eminently satisfactory. The total number both of strikes and of striking employees was much smaller than during the preceding year. The trouble with the cigar makers referred to was caused by the refusal of the operatives to register in accordance with an order of the collector of internal revenue, authorized by the internal-revenue law. The purpose of this provision was to furnish the government with a check on all cigar makers, including those working in their own homes—a very necessary protection to the revenue. The objections of the striking employees were directed at the feature of the regulations which required that the certificates of registration be kept by the employer, and at that which provided for the official recognition of the customary distinction between fully qualified cigar makers and apprentices. Since the first of these points was not considered a matter of vital importance, and since the second was objected to by the very class whom it was intended to benefit, it seemed best to modify them in accordance with the desires of the operatives. The ultimate result of this strike was a better understanding between the government, the cigar manufacturers, and their employees; and in consequence the number and seriousness of

cigar-makers' strikes in general much decreased. None of the other strikes in any department of industry which occurred during the year was of importance.

PUBLIC HEALTH AND SANITATION.

The public health during the past year has been in the main excellent, and as a whole vastly superior to that existing during any previous year under any régime. The only untoward event was the outbreak, just before the beginning of the year, and the continuance during the first six months, though never in excessively alarming or uncontrollable numbers, of cases of bubonic plague, from which the country had, since 1906, been altogether free. The efficiency of the bureau of health was again strikingly demonstrated in the control of the disease with a total of 67 cases with 57 deaths in Manila, and 9 cases and 9 deaths in Iloilo.

For the first time for very many years there has been no record of a case of cholera in the islands. Deaths from smallpox continue few; they occur chiefly in the remote localities, and all among persons, especially children, who, through slackness on the part of local authorities have not been properly protected by vaccination. Beriberi has continued to be practically nonexistent wherever the use of unpolished rice can be enforced. The work of segregating all cases of leprosy goes on, and conditions at the leper colony are increasingly satisfactory; experience, however, is showing that the local centers of infection are somewhat more serious than had been supposed, and the decrease in the number of new cases can not be quite as rapid as was at one time hoped. During the year two cases of what appear to be complete cures of the disease through the use of the chaulmoogra oil treatment have been recorded, and the patients discharged; while a number of other cases show favorable symptoms. The proportion of all cases treated, however, which show such improvement is still too small to warrant a statement that a specific for leprosy has been discovered. Tuberculosis continues to be the most serious existing menace to the general health and longevity of the people of the Philippines, and the existing facilities for combating it, while productive of much good, are altogether inadequate as a means of grappling with the problem.

The new Southern Islands Hospital in Cebu was finally put in operation during the latter half of the year, and has already afforded much relief to the population of a great area.

The general sanitation of the islands continues to improve, though everywhere, and especially in the Provinces, the need for sanitary improvements, education, and inspection is much greater than can be met with the funds available. In Manila, at a very moderate expense, the mosquito nuisance has been greatly reduced. It will, however, not be possible completely to eradicate them until much expensive engineering work has been done in the way of filling in lowlands liable to flood. In both the capital and the provincial towns perhaps no improvement has contributed more to the diminution of certain classes of diseases than the establishment of sanitary markets, and the restriction to them of the sale of perishable foods. The increase in the number of such markets through

the loan of insular funds to the municipalities has been actively pushed this year, as shown in the report of the executive secretary.

Notable progress continues to be made in the drilling of artesian wells. Since the work was begun in 1905 no less than 825 have been completed. Their beneficial effect on the public health of communities where they have been provided becomes more and more apparent with the passage of time.

The net effect of these improvements is strikingly brought out in the death rates for the city of Manila, and among government employees, these two being the only units for which it has so far been possible to secure figures known to be reasonably reliable. In the capital the average monthly death rate for the last six months of the fiscal year was 23.96—by no means an excessively high figure when all conditions are considered—and this is to be compared with an average for the same period of the last five fiscal years of 34.31—a decrease of nearly a third. The death rate among government employees for the year just closed was but 3.18 per 1,000; among Americans 2.47, and among Filipinos 3.46. After all allowances for age distribution and other abnormal conditions have been made this is still very low.

Reference has often been made to the fearful rate of mortality among infants in the Philippines. As yet but little has been actually accomplished in remedying this condition, owing in part to the fact that until recently there were other necessities more immediately pressing, but very largely to the inherent difficulties of the problem. The work, however, of the committee which, under authority of the Legislature, has been making a special study of the question, makes it possible to say that a definite step has at last been taken leading to the application of remedies. This committee was authorized by Act No. 2116, passed February 1, 1912, but was not finally appointed until June, and this, combined with other unforeseen delays, made it impracticable to do more than to render a preliminary report to the Legislature at the session held that year. To make possible the completion of its work the Legislature then passed Act No. 2246, extending the life of the committee until a report should be rendered at the following session of 1913-14.

The preliminary report takes up the question of the excessive infant mortality of the islands in a general way, pointing out the chief causes as they appear from the data so far secured. Few if any of these were entirely unknown before, but many of them are brought out with new force and authority, and some definite proposals for legislative remedies are made. The principal causes assigned are ignorance of the elementary principles of sanitation, superstition, which leads, for example, to the very general custom of excluding fresh air from the houses at night, the unhealthy situation and surroundings of many houses and communities, the lack and poor distribution of qualified medical attendance, addiction to nostrums and quack medicines, and insufficiency and injudicious variety of food. Many of these result from deep-seated economic and social growths, which can not be immediately cured by any remedies, legislative or other. So far as the application of such remedies is possible, and they have not already been undertaken, the drafting of the necessary legislative or administrative measures awaits the final report of the committee.

RAILROADS.

The program of railroad construction on the island of Luzon by the Manila Railroad Co. has been steadily carried out during the year. The construction of the lines of the Philippine Railway Co. on the islands of Panay and Cebu was practically completed during the fiscal year 1911, but the disposition of certain outstanding minor items caused the final closing of the accounts to be delayed, and to be still unaccomplished at the end of the fiscal year 1913. On August 9, 1913, however, a final bond issue was made, and the matter definitely settled. Since no action has been taken by the Legislature on the proposal to relieve the company from the obligation to construct a line on the island of Negros, the Governor General, on June 24, 1913, authorized the extension of time for its completion "until such time as the Legislature shall have acted on the matter, or until such time as both parties to the contract (Act No. 1497) shall desire its fulfillment."

On the northern lines of the Manila Railroad Co., the bonds of which are not guaranteed by the government, there were completed during the year 33.5 kilometers of grading, while 26 kilometers of track were laid and 13.3 kilometers were put in operation. On the southern lines, the bonds of which are guaranteed, 86 kilometers of grading were completed, 60.5 kilometers of track were laid, and 22 kilometers were put in operation. The total length of line put in operation was 35.4 kilometers. In the course of the year the main line north of Dagupan was declared in full commercial operation as far as South Bauang. The grading on the Baguio line was opened up for practically its entire length, while one of the necessary tunnels was nearly completed and the other well advanced; it is expected that this line will be finished by the beginning of the calendar year 1915.

Early in the fiscal year the bond section extending from Magdalena to Pagsanjan in Laguna Province was put in full commercial operation, thus completing the construction of that branch; and authority was granted, effective February 10, 1913, for the operation of the bond section from Tiaong to Lucena on the main line south. Work has been pushed steadily on the portion of the line beyond Lucena, which is to establish the first through land communication between Manila and the rich hemp-producing provinces of southern Luzon. This has been definitely located, subject to minor changes during construction, for nearly its entire length. At the end of the year the track laid came within 5 kilometers of the average necessary to complete the line, as authorized by Acts Nos. 1510 and 1905, on September 12, 1918. In all, of the 1,312 kilometers authorized by law the Manila Railroad Co. had constructed at the end of the fiscal year 829 kilometers, of which 761 were in operation, leaving 483 to be constructed. Of this last much the greater part, 417 kilometers, pertain to the southern or guaranteed lines.

The lines of the Manila Railroad Co. were operated with success throughout the year; there were no heavy floods and the track was maintained in good condition for all lines. The company reports an increase in operating revenue for the calendar year 1912 as compared with the preceding year of 56 per cent, while the figures for the first six months of the current year promise a further heavy increase. The

Philippine Railway Co. was less fortunate. The islands of Panay and Cebu were visited by severe typhoons, causing considerable damage to the track and bridges of the company and to the agricultural products that compose most of the freight; the traffic in consequence was adversely affected, and the operating revenue fell considerably below that of the preceding year.

FRIAR LANDS.

The administration of the estates acquired by purchase from the religious corporations, and known as friar lands, was carried out during the past year with a minimum of friction and at a decreased cost. The disposition of practically the whole of the occupied portions of the estates, about five-eighths of the total area, is now substantially accomplished, the sales being either already completed or contracted for on the basis of payment in installments. The receipts for 1913 materially exceeded those for 1912 despite the fact that the two estates in Cebu again suffered so severely from typhoons and locusts that collections were very small. Elsewhere harvests were abundant and the purchasers of the lands as a rule made every attempt to pay their installments. The order of the Secretary of War restricting the sale of land on friar estates to the provisions of the public land act is still in force, and has continued to make the disposition of the large unoccupied tracts of the original estates which remain in the hands of the government an exceedingly difficult matter. The outlook for the current year is very favorable, and it is believed that, barring unforeseen calamities, the collections will exceed those of the year just closed.

PUBLIC LANDS.

Increased activity was displayed in the taking up of tracts of public land by one or another of the methods provided by law, though the area thus sought after is still trifling in comparison with the total available. The number and area of homesteads applied for increased very materially, due to the fact that the public land inspectors, whose number has been increased, have been demonstrating throughout the provinces the methods of obtaining public lands, and that the good crops in most sections have given the small farmer the necessary means to increase his land holdings. Homesteaders are now being given more assistance by the inspectors and are being better protected in the courts. The number of delinquents in the payment of homestead installments, however, still continues discouragingly large. Location of mineral claims, principally gold, increased considerably during the year. The gold mining industry in the islands has now passed the experimental stage and is well established as a permanent factor in local prosperity. In this connection attention may be invited to the remarkable increase in the output of gold. From a value of \$93,824 in the calendar year 1907 and \$154,430 in 1910, it rose to a value of \$570,212 in 1912, and seems likely, from present indication, to reach \$800,000 in the course of the current year.

THE CADASTRAL SURVEY.

Act No. 2259, known as the Cadastral Act, was passed by the Legislature on February 11, 1913; it provides for the survey of all lands

within a given district at one time, the bringing of the adjudication of the titles to all the land surveyed to the land court, and for the extending of the payment of the cost by the landowner over a period of five years. Experience has shown that the average cost per parcel is very much smaller where this method is used, and the burden on the landowner consequently less. The most successful application of the system prior to the passage of the act above referred to was in the case of the town of Zamboanga, described in the last annual report of the Governor General.

Soon after the passage of the act preliminary work was started on cadastral surveys in the province of Occidental Negros, but the condition of the government finances, with a considerable anticipated reduction of revenue, made immediate progress impossible. Final approval for surveys in certain towns was given at the close of the year. Authority has also been requested to begin surveys in the municipalities of Cebu and Iloilo. In the city of Manila a survey of this description, undertaken before the passage of Act No. 2259, was in progress throughout the year, with the intention, however, of applying the provisions of the act immediately after the beginning of the new fiscal year. A letter of explanation is now in process of preparation, to be sent to all local officials and to influential residents, enlisting their support of the program.

It is believed that the effect of the law will be to reduce the cost of the registration of title, including surveys, attorneys' fees, etc., by at least one-half; that it will permanently segregate public from private domain; that it will provide the various officials of the government with badly needed accurate plans of municipalities; and that, by reducing the amount of nonassessment and undervaluation, it will increase the total assessment of land for taxation possibly to the extent of 25 per cent. The progress of the completion of a cadastral survey of the islands will necessarily be very gradual. The present plan is to cover, if possible, 100,000 parcels a year, which would dispose of the estimated area in private ownership in about 25 years. It will not be possible, however, to do this without an increase in the surveying personnel and in that of the court of land registration.

AGRICULTURAL AND OTHER PRODUCTS—RINDERPEST.

The condition of agricultural industry has been moderately satisfactory during the year, though some of the conditions have been very adverse. The unprecedented drought of 1911-12 had already been broken before the beginning of the fiscal year just closed, but the severe typhoons of October and November, 1912, did great damage to crops in the southern islands. The normal rainfall over the islands as a whole, however, resulted in a very satisfactory rice crop, probably 100 per cent greater than that of the preceding year; and this, as elsewhere stated, caused the reduction of the importations of rice by a quarter and seriously embarrassed the available means of communication to bring it to market. It is to be wished that this might prove to mark a step permanently gained in the solution of the problem of the islands providing their own food supply; but it is too early to make any definite prophecy on this point.

The efforts made during and immediately after the drought of last year to encourage the planting of a relatively hardy and quick-growing cereal crop to make up for the shortage in rice, followed up by the "corn campaign" conducted by the bureau of education, resulted in a marked increase in the crop of maize, or Indian corn, and, it is believed, in a permanent increase of its popularity among the people of the islands as a food for human consumption.

The situation as regards the great export crops of hemp, copra, and sugar was, throughout most of the year, and indeed still is in many respects, unsatisfactory. The price of hemp rose sharply in the course of the year, though it fell off rapidly again during last June and July; a fact which suggests that the increase was largely speculative. The general conditions of the industry, as regards the problems of grading, improvement in methods of stripping, and reorganization of the provincial buying trade, have not perceptibly improved. In December, 1911, the Commission appointed a committee of two of its members to report on the situation. The report was finally rendered in April last. It recommended, as the most necessary measures, a campaign of education in cultivating, cleaning, and grading the fiber; the formation of cooperative unions of producers, with possible future assistance from the Agricultural Bank; and the establishment of a system of official grading and stamping. The last recommendation is opposed by the large hemp dealers. To carry out this program the committee recommended legislation standardizing the grades of abaca, penalizing the export of inferior or unclassified qualities, providing for the appointment of government classifiers, and for the reimbursement of their salaries and of other expenses by charges for classification and stamping. Since this involved special legislation and an appropriation, it has not yet been possible to put it into effect. The lack of a satisfactory hemp-stripping machine still hampers the placing of this valuable natural monopoly of the Philippines upon an entirely satisfactory commercial basis.

The copra crop, although there continued to be a good demand, and although the price showed the same upward trend that has been apparent each year since 1903, was much reduced in amount, as the accumulated result of damage wrought by drought and typhoons in 1911 and 1912. As a relatively long time elapses between the flowering and fruiting of the coconut palm, and as it does not begin to bear for from 7 to 10 years after planting, the recovery of the plantations from disasters of this kind is inevitably slow. The quality of Philippine copra, though still ranking low among that of producing countries in general, slowly improves. The bureau of agriculture is steadily endeavoring to promote the use of properly constructed artificial driers, and the proportion thus prepared for market increases.

Although the immediate crisis in the sugar industry referred to in the annual report of the Commission for 1912 was safely passed through, conditions in general remained unsatisfactory throughout the year. The quality of the product was poor, and the financial difficulties of the planters as a body were pressing. It has always been difficult for these men to get the necessary money for cutting, milling, and moving their crop, and not even possible except at the most ruinous rates. This past year the situation was such that the

intervention of the government seemed necessary; and the Governor General, at the instance of the Economic Association of the Philippines, appointed a committee, headed by the insular treasurer, to investigate the possibilities of offering relief. As a result of the recommendation of this committee, he directed, on June 13, 1913, that ₱1,500,000 of insular funds be deposited in the Bank of the Philippine Islands, at an interest of 1 per cent, to be used for the specific purpose of making loans on growing crops to the planters of Negros and Panay. In making these loans the bank was specifically directed to charge not more than 8 per cent per annum; to advance not more than ₱2 per estimated picul ($137\frac{1}{2}$ pounds) on one crop; and to make no loans on a crop that was already mortgaged. The attainment of permanent prosperity, however, by the sugar industry of the Philippines will be dependent in the long run on the improvement of the methods of cultivation, and of the plants that prepare the crop for market. In this regard there is considerable progress to report during the year. The next year or two should see an advance more marked.

The situation in the tobacco growing and manufacturing industries during the past year has been fairly satisfactory. The crop increased in quantity and tends to improve in quality. The work of the tobacco station maintained by the bureau of agriculture at Ilagan, Isabela, is bearing fruit; and some progress has been made in this, the chief tobacco-growing district of the islands, in the erection of proper curing sheds.

During the last quarter of the year very severe outbreaks of locusts appeared in eastern and southern Luzon, and at its close 33 out of the 38 Provinces were more or less infested. The work of destruction in the cultivated areas has been pushed to the utmost, and has always, within any given place and time, been carried to success; but in some provinces the condition is so widespread that it must necessarily be a question of months, if not years, before the uncultivated tracts are completely cleared of the breeding swarms which there persist and resist all regular measures of control. There has been on the whole an increasing degree of cooperation on the part of the local authorities and the people in the necessary work, though it sometimes imposes appreciable inconvenience, or even hardship, on the latter. The experiments with *bacilli parasitic* in the migratory locusts, while very successful in the laboratory, have not so far proved of much practicable value in the field. It is hoped that further research will result in the discovery of a really effective remedy.

The campaign against animal diseases, of which the most menacing is rinderpest, has been steadily pushed during the year. At the end 8 Provinces, with 24 municipalities, were known to be infected, a smaller number than at the end of the preceding year, though slightly larger than at one time in the course of the 12 months. Altogether 4,731 cases were reported, with 2,787 deaths, an increase of 419 cases but a decrease of 60 deaths as compared with the preceding year; the number of both cases and deaths was largest in the third quarter. On the whole, therefore, the situation is not materially changed, although it is of course in every way a vast improvement on that of a few years ago. Strict quarantine of infected districts has continued to prove the most effective means of dealing with the problem. At the close of the year a total of 90 officers and enlisted men of the

constabulary and 901 of the Philippine Scouts were on duty assisting in the campaign. Their work has been done in an extremely creditable manner. Experience with the introduction of the disease by cattle shipped from foreign ports has proved so unfortunate that quarantines on such shipments, of varying duration and degrees of strictness, have been very generally maintained, and the imports have fallen off materially. Only two shipments of cattle and carabao have been imported during the year from Indo-China.

This seems a convenient place to note the highly satisfactory progress made in the development of the most important natural resource of the islands, next to that of agriculture—their forests of hardwoods. The output of commercial timber during the fiscal year 1906 amounted to about 28,000,000 board feet; seven years later, during the year just closed, it had more than quadrupled, reaching 117,000,000 board feet, a figure larger than the estimates based on the output for the first months of the year.

THE PUBLIC SCHOOLS.

Except in the matter of enrollment, the causes for the decrease in which are discussed in the report of the secretary of public instruction, the progress of the public schools during the year just closed has been steady and encouraging. The standard of English instruction has been raised materially, the campaign for better school buildings and grounds has been continued vigorously, and with most successful results. Industrial instruction has never been on a sounder basis than at present. Further improvement in the American and Filipino personnel has been very marked. The most successful vacation assembly yet conducted was held at Baguio. The athletic program is being accomplished in such a way that a large percentage of the pupils are receiving physical training in one form or another. Although the enrollment fell during the past year, the percentage of attendance increased from 83 to 87.

The policy of eliminating from the American teaching force all whose services did not meet a definite high standard, now followed consistently for several years, has resulted in the formation of a body of men and women of exceptional efficiency. A larger number qualified for this service in the United States than heretofore, and the 85 new teachers employed, a smaller number than usual, were of excellent character and preparation. The number of Filipino teachers on duty at the close of the school year was 7,013, of whom 1,154 received salaries from insular funds, 5,759 from municipal funds, and 100 were apprentice teachers without salary. This force showed great advancement in their average attainments and ability to teach. Filipinos are being assigned to positions of greater responsibility as rapidly as possible. The salaries of the insular Filipino teachers averaged ₱50.31 per month as against ₱49.88 for the year 1911-12; the salaries of municipal teachers averaged ₱21.25, as against ₱19.93.

There has been progress in establishing the six courses which it is desired to offer in the intermediate schools, though the number of those giving the courses which require a considerable or expensive plant is of necessity relatively small. There are 259 intermediate schools offering the general course; 96 the housekeeping and household arts course; 49 the teaching course; 6 the farming course; and 2 the course in business.

A building program has been laid down whereby no insular funds are to be expended for construction purposes, unless sites have been provided containing at least 5,000 square meters in the case of barrio schools and 10,000 in the case of central schools. The local authorities are encouraged to acquire suitable sites whenever possible. Up to a maximum of ₱5,000 insular funds are made available for the aid of municipalities in schoolhouse construction, on condition that they give half as much as the insular government. When permanent buildings can not be erected, the authorities are encouraged to erect satisfactory temporary buildings, for which certain minimum requirements are laid down. There are now 1,032 standard school sites, of which 389 are a hectare or more in extent, and of which 563 were secured during the past fiscal year, as against 244 for the year preceding. During this year 111 standard plan schoolhouses have been completed, providing ample accommodation for nearly 22,000 pupils. The total number of schoolhouses classed as permanent, in use at the end of the year, was 592. In addition to these there were 782 buildings classed as "mixed," more than half of which would be called permanent as the term is generally used in the United States.

The special insular schools all made satisfactory progress in the course of the year. The Philippine Normal School now occupies a new concrete building in the heart of the proposed educational center of Manila. Of those who graduated from this school during the last three years, 97 per cent have entered the teaching service, and so far not one has abandoned his profession.

The Philippine School of Arts and Trades has steadily increased in popularity, and it has been necessary to turn away a number of candidates for admission. The total number of pupils enrolled this year was 601. Although no effort was made to increase the amount of commercial work, the figure for 1912-13 shows a marked increase over the preceding year. Thirty-three of the 34 students graduated in 1912 are engaged in work directly or indirectly connected with the courses they pursued, while 35 nongraduates secured positions. Of the total 121 graduated in previous years, 105 secured positions directly in line with their work, and only 5 were unemployed when last heard from. On request of the Shipowners' Association, and in view of the great importance of the domestic mercantile marine in a country consisting of an archipelago, steps were taken to establish a nautical department. After two years at the school, pupils will be given 18 months' practical training on the interisland vessels.

The School of Commerce shows continued progress in the number and character of pupils admitted, though the number of graduates, owing to the opportunities for obtaining positions before the completion of any course, remains very small. In the commercial night school maintained last year there was an enrollment of 362. The School of Household Industries has completed the first year of its existence. Its purpose is to train adult women in certain selected home industries, particularly embroidery and lace making. It has done very superior work, and has now an attendance of approximately 120 women.

The policy of supporting a limited number of promising young men and women from the provinces, known as "pensionados," in the insular schools, on condition that they afterwards engage in teaching for a period equal to that during which they enjoyed their scholar-

ships, has been continued with excellent results. The number of such "pensionados" assigned to the Normal School, the School of Arts and Trades, and the College of Agriculture of the University of the Philippines, is approximately 240.

Substantial progress has been made in connection with the schools for non-Christians, and strong schools are being developed at the principal centers of population. The schools of the subprovince of Bukidnon continue to be first in the islands in matters relating to minor agriculture. The special school for Tagbanuas at Aborlan, Palawan, has made very notable progress, and has become the center of a flourishing settlement of this people, who had formerly lived in a state of practical savagery.

In addition to the regular athletics in every locality in the islands, a Far Eastern Olympiad was held this year in Manila from February 1 to 9, in connection with the Philippine Carnival; in this China, Japan, and the Philippines competed. The islands were victorious in a good share of events, but, apart from any question of success or failure, the significance of this series of games was very great, since it made the Philippines the originator of the first event of the kind in the Far East. In all athletics in the islands the spirit of sportsmanship displayed continues to show marked improvement.

Industrial work is now organized on a firmer basis than ever, 736 teachers giving their entire time to it. No pupil is passed through the primary and intermediate grades without some industrial instruction, and 91 per cent of the average enrollment of pupils for February last were engaging in some form of industry. The number of provincial trade schools has risen from five in 1909 to 18 in 1913; and in addition there are now 121 intermediate school shops. In these schools commercial work to the value of ₱175,683.14 was produced during the year, of which ₱35,136.63 was received as compensation by the pupils. Statistics show that the value of embroideries exported from the islands has increased from ₱199,732 in 1911 to ₱390,910 in 1913; and it is believed that the instruction given in the schools has contributed much to this noteworthy progress. The showing made in the extension of gardening from the schools to the homes of the people is especially encouraging, more than 35,000 gardens were reported cultivated by the pupils themselves at their homes.

A special feature of the work of the schools during the past year was a campaign to encourage the use of Indian corn as a human food and the extent of its cultivation. It secured the enthusiastic support of officials and people, and it is believed that much of permanent value was accomplished. Some 30,000 boys were enrolled in the corn-growing contests, and there were held 235 demonstrations, at which nearly a quarter of a million people were served.

UNIVERSITY OF THE PHILIPPINES.

It is again possible to record marked progress in the necessarily slow work of building up in the Philippines an educational institution of university rank, which may be fitted to take its place with those long established in other parts of the world, and to become a worthy head and center of the public school system of the islands. The president of the university was on leave in the United States and

Europe during a considerable part of the year, and was thereby enabled to make valuable studies of university methods, and to consult with men of standing and experience as to local problems. He found that in various ways the work of the university has become favorably known abroad, especially that of its oldest department, the College of Medicine and Surgery, which has now been admitted to the Association of American Medical Schools as a "Class A" college.

The registration during the college year 1912-13 was as follows: College of Liberal Arts, 200; College of Medicine and Surgery, 73; College of Agriculture, 253; College of Veterinary Science, 27; College of Law, 146; College of Engineering, 5; making a total of 704 in the strictly collegiate courses, in addition to which there were enrolled 694 in the School of Fine Arts. The registration in the College of Liberal Arts includes those taking the two-year preparatory courses in medicine, engineering, and law, and two years of the term required for the course in pharmacy. In the College of Agriculture are included 70 students holding scholarships in the forestry department under the appointment of the Director of Forestry. The raising of the entrance requirements in the College of Law materially reduced the number of the entering class, but improved its quality. The small enrollment in the College of Engineering is largely due to its recent establishment, the first only of the prescribed four years' work having been given during the year just closed; nevertheless, the small interest aroused in this course in a country where there is a vital need of trained engineers, as compared with that aroused by the courses in law and fine arts, is disappointing. The excessive enrollment in the School of Fine Arts when it was first opened has been materially reduced by receiving only those who after examination showed decided talent.

At the third annual commencement, held April 4, 1913, 50 degrees in course were conferred. There were 12 bachelors of arts, 4 of whom were women, and 1 of the latter was the first graduate of the university to receive a degree with honors; there were also conferred 6 degrees in agriculture, 19 in law, and 8 in medicine, and 5 masters' degrees in arts and science. Twelve Americans received degrees. The one honorary degree conferred was that of doctor of laws on Hon. T. H. Pardo de Tavera, one of the original Filipino appointees to the Philippine Commission in 1901, and a member of that body till 1909.

The financial situation of the university has been satisfactory, though the work that might be done is far beyond its resources. The appropriation of ₱625,000 requested for the fiscal year 1914 was made in the form of a special act at the last session of the Legislature. An effort has been made to relieve the university of the obligation of expending its funds on objects such as the maintenance of free beds in the Philippine General Hospital, which are not strictly within the scope of its purpose; and this has been accomplished through the medium of an allotment from the appropriation for the charitable work of the government.

A definite beginning was made in graduate instruction in the course of the past year, and the first masters' degrees were conferred at its end; but it was decided to postpone for the present the granting of the degree of doctor of philosophy, it being felt more desirable

that effort should be concentrated on undergraduate work. The institution of five fellowships for Filipino instructors by Act No. 2095 makes it possible for junior members of the faculty who evince special ability to go abroad for their doctors' degrees. Two such appointments have already been made, both from the College of Medicine and Surgery. The special facilities which exist in Manila, however, for the study of tropical diseases and tropical sanitation have made it seem advisable that a special graduate course in these subjects be established.

The course for the attainment of the bachelor of arts degree remains the same; that is, it is assimilated to the revised standard course required of colleges in the islands, and provides for the granting of the degree when the student has reached a point approximately equal to the completion of the sophomore year of an American college course. The majority of the 1912 graduates of the College of Liberal Arts are pursuing their further studies at the university. In the course of the year the director of constabulary made arrangements to admit without further mental examination graduates of this college as third lieutenants in the constabulary.

The College of Agriculture has proved the most popular of the noncultural departments of the university, a very encouraging fact in a country which depends so largely on the cultivation of the soil for its prosperity. Arrangements have been made for the establishment on an additional tract of land acquired near the college of one of the regular demonstration farms of the bureau of agriculture. Before this the custom had been instituted of throwing open the grounds of the college to the public once each month for demonstration purposes. The college is situated in one of the richest agricultural sections in the islands, and the farmers of the locality and the students should both gain great benefits from these opportunities.

The other colleges continued during the past year to prosper, though interest in the Engineering College develops very slowly. The popularity of the College of Veterinary Science is increasing, and the enrollment, though not yet large, is growing with relative rapidity.

As regards the student body as a whole, their conduct and interest leaves little to be desired, and their work is for the most part satisfactory. The conditions under which many of them live, in the absence of dormitories owned by the university, offers a serious problem, and it is probable that the university authorities will be obliged to take steps to exercise a rigid supervision in the matter. A physical examination made of a considerable number of students disclosed a somewhat alarming proportion affected with more or less serious organic troubles, though they are representatives of the best class of Filipinos, and there is no reason to think that their ailments arise from college work or life. Every measure possible to correct this condition by the requirement of physical exercise is being undertaken.

The number of qualified Filipinos appointed to instructorships steadily increases. The relations of the university with the bureau of education have been close, and special arrangements are being made, in pursuance of a plan outlined by Prof. Paul Monroe, of Columbia University, for a systematic course for the training of high-school teachers. At the beginning of the current academic year, 1913-14, it was possible to make use of the just completed University Hall

and to install in it the general offices and the recitation classes of the Colleges of Liberal Arts, Engineering, and Law. The greatest immediate future need is for a laboratory building; for this an appropriation was made at the last session of the Legislature, but in view of the financial situation of the government, it has not yet seemed expedient to release the necessary funds.

The enrollment for the first semester of the current academic year shows an increase in the collegiate departments of 180, or more than 25 per cent.

USE OF THE ENGLISH LANGUAGE.

At the time of submitting the last annual report of the Governor General, the situation in regard to the complete and final establishment of English as the official language of the government remained, as it had been for some years, unsatisfactory. The date on which English should replace Spanish as the official language of the courts had been several times postponed, finally to January 1, 1913; and the effect of these postponements on the readiness of adult Filipinos to undertake the study of English has been frequently commented upon. During the session of the Legislature of 1911-12 the Assembly passed a bill further postponing the use of English as the official language of the courts until January 1, 1917. Believing that action in this form would simply do harm, the Commission amended the bill, leaving the date unchanged, but putting it in the discretion of the courts whether or not the record should be made in the Spanish language, allowing any party or counsel to examine or cross-examine witnesses or make an oral argument in Spanish, permitting any party to submit application, pleading, or brief in Spanish, and in cases where all the parties or counsel might so stipulate, allowing the proceedings to be conducted in Spanish. As this amendment failed in conference, English became the official language of the courts on the 1st of last January.

It was desired, however, that the matter should not go by default, but that the final settlement should be formally satisfactory to all concerned; and so, to this end, Act No. 2239 was passed February 11, 1913, taking effect retroactively January 1, embodying the provisions just cited in regard to court proceedings and setting forth that while English was to remain the primary official language of the courts Spanish should, to the extent required by those provisions, be also an official language until January 1, 1920.

The executive order in regard to the use of English in official correspondence and in the minutes of provincial boards and municipal councils, which was issued on August 8, 1912, and referred to in the last annual report of the Governor General, has had an excellent effect. A noticeably larger proportion of the letters and other documents received are in the English language, and the employment in the local government offices of the English-educated young people has been encouraged.

PUBLIC WORKS.

The construction of public works in the Philippines continues, in the absence of any action by Congress on previous recommendations for an extension of the borrowing powers of the government, to be paid for almost entirely out of current revenues. The burden is a

heavy one, and the amount accomplished is necessarily limited. The problem, moreover, becomes more serious with the lapse of time, because as the volume of public works increases the cost of maintenance absorbs a continually greater part of the available funds, and the proportion which can be devoted to new construction becomes progressively smaller. The cost of maintenance of some public works is small; but in the case of others the problem is very serious.

The total kilometerage of roads, exclusive of those of the city of Manila and the special government provinces, at the close of the year was 7,249.7, of which 2,097.3 kilometers were first class, 2,034.3 second class, and 3,118.1 third class. The figure for first-class road represented an increase of 14 per cent over the preceding year. An average of 1,976 kilometers were maintained under the isolated caminero system, the only method whereby it is possible, in this climate, to keep roads in thoroughly first-class shape. The early first-class roads of the islands were too lightly constructed, and those now being built are much more substantially surfaced. This is particularly necessary in view of the great increase in the use of motor vehicles, even in comparatively remote localities, for freight as well as passenger service. In certain sections subject to particularly heavy traffic oiled and bituminous bound roads have been found advantageous. At points on important roads a few miles out of Manila there has recently been recorded the passage of 3,000 to 3,500 vehicles a day.

The total number of durable bridges and culverts at the close of the year was 5,660, an increase of 9 per cent over the year preceding. A special feature of recent bridge construction has been the development of two types of structure especially adapted to meet a situation very commonly encountered in the Philippines, and very hard to overcome; that is, where an important road crosses a comparatively wide stream bed, having a small dry weather flow, but a considerable wet season flow with liability to heavy floods, which carry large amounts of drift. These types are the concrete pile bridge with reinforced girder spans, usually of about 7 meters each, and the collapsible bridge. The latter is used where the height of the floods and the amount of drift are extreme; it is so built that the superstructure can be floated off, without being lost, and later replaced, with a minimum interruption of traffic. Several important bridges of ordinary type have been completed during the year.

Work on public buildings, aside from two or three special projects in Manila, has been largely concentrated on markets and school buildings in the provinces. Both of these classes are now constructed from standard plans, and satisfactory results are obtained at the smallest cost consistent with safe construction and durability.

The drilling of artesian wells goes on steadily, and experience is making the percentage of failures much smaller than was formerly the case. It is also, however, making plain the fact that some sections of the islands are deprived by nature of the possibility of securing a water supply by this means; and this necessitates the putting of as much effort as possible into the design and development of small water supply systems of other types for communities so located. At present 20 of these projects have reached the estimate stage.

The development of irrigation in the islands continues slow. Experience has amply demonstrated the unwisdom of sinking large sums

of money in irrigation systems in the Philippines before the most exhaustive investigations have been made as to rainfall and the geological structure of the proposed locations; and such investigations ought properly to cover considerable periods of time. The San Miguel system in Tarlac Province is still the only large project under construction; when the work is completed, which should be before the end of the present calendar year, it will irrigate nearly 10,000 acres of land. Preliminary work has been completed on the Santa Barbara project, in Iloilo Province, to irrigate a like area, and construction can begin when the landowners have signed the reimbursement contracts, provided that it is practicable to release the necessary funds. Other projects are being given careful study.

JUSTICE.

The administration of justice has been carried on during the year without friction or obstruction of consequence. The personnel of the courts of first instance has long been somewhat insufficient for the speedy accomplishment of all the work devolving upon them; and that of the court of land registration is entirely too small if progress in the registration of title to all the occupied real estate in the islands is to be made under the new cadastral act at the desired rate. These facts were among the motives which led to the discussion by the legislature during its last session of a bill radically reorganizing these branches of the judicial department of the government. No conclusion was reached, however, and at the end of the special session of 1913 no action had been taken.

The work of the court of land registration has materially increased during the year, partly as a result of more extended knowledge of the advantages of a registered title, but mainly through the institution of cadastral cases. At the best, however, it is scarcely possible for the present personnel of the court to keep up with the annual increase in the number of parcels owned, even ignoring the question of completing the registration of the great mass which have long been in private possession. The provisions inserted in the acts reorganizing the justice of the peace courts, conferring upon the latter original jurisdiction in certain land registration cases, have been held unconstitutional by the Supreme Court, and relief in this direction from the present pressure can not therefore be sought.

The main provisions of the acts just referred to, which put the justices of the peace on a salary basis, have now been in operation for a sufficiently long time to make it safe to say that the new régime is a great improvement on the old. The net cost of operation amounted to about ₱117,000 for the past year, but this is believed to be a very moderate price to pay for the advantages obtained. It has been possible to secure a materially higher average of personnel, particularly under the special qualifications laid down for justices of the peace in the provincial capitals.

THE PHILIPPINE LIBRARY.

The work of this important institution has expanded noticeably during the year. Both the circulation and the use of the reading room have materially increased, until there has come to be decided pressure on available space. The proportion of Filipinos among those

using the reading room increases rapidly, and this year it was 70 or 80 per cent, the larger part, of course, being students. Good progress is being made in building up a comprehensive library on oriental subjects, and it is believed that in this respect the library now stands high among those of the Far East. The collection of books, pamphlets, periodicals, and manuscripts relating to the Philippines is now unquestionably the most extensive in existence. Aside from its routine acquisitions, its preeminence was assured in the course of the past year by the purchase of the splendid collection of the *Compañía General de Tabacos de Filipinos*, hitherto kept at Barcelona. This was made possible by a special appropriation passed by the legislature at its last session. This branch of the library has also acquired some valuable documents relating to the trial of Dr. Rizal.

TYPHOONS.

The first three months of the rainy season of 1912 were comparatively free from typhoons, and throughout the year the northern part of Luzon was not visited by any as severe as usual, not to say any as destructive as that of July, 1911. On October 15, however, a very severe typhoon swept the Visayas and the northern part of Cebu, and to portions of Surigao, Leyte, Negros, and Panay. Very extensive destruction of crops occurred in all these sections, and the effects of this were plainly shown, as already stated, in the collections on the friar estates in Cebu and in the earnings of the Philippine Railway Co. The city of Cebu suffered severely. Nearly all the vessels in the harbor were wrecked or put entirely out of commission, and a very large number of dwellings and commercial buildings were destroyed. Similar damage, on a smaller scale, was done in other towns of Cebu, and in some of those in Leyte. In the central village of the municipality of Liloan only 5 out of 200 houses were left standing.

When the news of the disaster reached Manila, action to relieve the sufferers was taken with the greatest promptness. Within five hours a coast-guard cutter sailed with provisions, physicians, nurses, and medical supplies. The military authorities rendered valuable assistance, detailing nurses, medical officers, and men of the Hospital Corps to accompany the expedition, while the naval authorities dispatched a fast cruiser, equipped with wireless apparatus. It ultimately turned out that the injured were comparatively few, most of the deaths having been by drowning, so that the chief need was for food supplies and assistance in rebuilding dwellings. The provincial and municipal authorities did creditable work in supplying such immediate relief as was available, and later in assisting the force sent from Manila. The total loss of life was estimated in the neighborhood of 500. The property loss was very great, though the exact amount could not be estimated with accuracy.

On November 27 another typhoon, fortunately less severe, passed over the Visayas, its greatest force being felt in northern Leyte and eastern Samar. The damage done to buildings and crops was extensive; but here, again, relief measures were prompt and effective.

In view of the seriousness of these emergencies, the Acting Governor General authorized in each case the expenditure by bureaus and provinces of such available funds as might be necessary for relief purposes. On December 11, therefore, with the object of reim-

bursing these expenditures, and providing means for the improvement of the devastated towns, the Legislature passed Act No. 2199, appropriating ₱500,000. The expenditure incurred in the emergency measures, including the purchase of rice, charter of vessels, and labor upon public works to furnish temporary employment for the destitute, amounted to ₱215,000. The remaining ₱285,000 was on January 18, 1913, allotted by the Governor General to the provinces affected by the typhoons under conditions which permitted the funds to be used for the reconstruction and improvement of public works and buildings and the extinction of locusts.

EXPOSITIONS.

The appointment and organization of a board to prepare a Philippine exhibit for the Panama-Pacific International Exposition in 1915 at San Francisco, and to administer the funds appropriated for that purpose by Act No. 2163, was referred to in the last annual report of the Governor General. All that there has been any opportunity for doing during the year just closed has been, of course, to continue the preparatory measures already initiated. By the terms of the act the sum of ₱50,000 was available for expenditure during this period. Up to the end of the fiscal year only a very small part of this had been expended—entirely for minor routine purposes. Recently allotments have been made to certain of the bureaus to permit of their making a definite start on the preparation of their exhibits. The site secured for the Philippine exhibit on the exposition grounds is very satisfactorily located, though not as large as originally desired. No progress has so far been made in securing additional funds, although the board still believes that the original appropriation will not be sufficient for the preparation and administrative expenses of a thoroughly creditable exhibit. It is still hoped that further specific appropriations will be secured from some source.

The great success of the first Philippine exposition held in Manila in February, 1912, had caused it to be decided at the time to hold another in 1914; but the fact of this date falling just before that of the San Francisco exposition will make the local exhibition of particular value as a means of making a preliminary collection of certain products to be used later for the Philippine exhibit in 1915, and in other respects determining in advance the lines along which the efforts of those responsible for the latter can best be put forth. On February 6, 1913, the Legislature passed Acts Nos. 2224 and 2225, providing for an exposition and the appointment of a directing board, and appropriating ₱100,000 for the purpose. The board was completely organized about May 1, and at its request Mr. W. W. Barclay, special agent of the executive secretary who was director general of the first exposition, was again detailed to act as director. Since then no pains have been spared to organize an exhibition which shall in every respect be a worthy advertisement of the resources of the islands, of the enterprise of the business community, and of the policy of the Government to encourage the prosperity of the people. It is now assured that such of the bureaus as are in a position to do so, the business men of Manila, and most of the provincial governments will have carefully prepared exhibits.

PUBLICITY WORK.

The publicity committee, representing jointly the government of the Philippine Islands and the Manila Merchants' Association, has continued during the year its work of spreading abroad a knowledge of the attractions and resources of the islands, with a view to attracting trade, securing a share of the tourist traffic of the Orient, and improving transportation facilities between the Philippines and other points. A general program has now been fully developed; branch offices have been operated in China, Japan, and the United States; and connections have been established with numerous commercial organizations of importance in the last named. A considerable amount of publicity literature has been published, and a number of special articles and lectures upon interesting features of the Philippine situation have been prepared and forwarded to the United States for publication. A plan has been developed looking toward the supplementing of the general publicity work by means of the cinematograph. An important advance in the development of the handling of the tourist trade has been made in the course of the year through the establishment in Manila of a branch office by Messrs. Thomas Cook & Son.

BOARD OF RATE REGULATION.

The work of the board of rate regulation is increasing rapidly and has about reached the point where it is impossible for the present organization to handle it satisfactorily. In addition to a number of hearings for the consideration of complaints and petitions, the board held 18 formal sessions during the fiscal year for the handling of other than ordinary routine matters. Cases of minor importance not involving original rulings or the determination of questions of policy are disposed of outside of session by a member of the board designated for the purpose. Five formal orders, numbered 16 to 20, inclusive, were issued during the year. Order No. 20, published June 21, 1913, and effective August 1, requires that the rates of all common carriers in the Philippine Islands published and in effect on July 1, 1913, shall be considered as maximum rates, and that no higher rates than these published and in effect on that date shall thereafter be published, demanded, or received without the prior approval of the board of rate regulation. It further orders that common carriers shall desist from the practice of requiring shippers to affix or pay for the internal-revenue stamps attached to bills of lading in compliance with a section of the internal-revenue law, holding that such a practice constitutes an increase in the maximum rates fixed by the board. This order is meeting with some opposition from the carriers. None of the other orders issued have been attacked.

The Acting Governor General is of the opinion that the board as at present constituted is not as useful to the community as such a board should be, and strongly recommends that a public utilities commission, having the powers and duties of such commissions in the States of the United States, be created to take the place of the present board of rate regulation. The necessity for such a body is very real.

THE SALES AGENCY.

The sales agency was organized in 1911, with a view to standardizing the products of the islands, especially those of handicrafts, distributing them advantageously in foreign markets, and circulating information to facilitate commercial transactions between the producers of the islands and those interested in their goods. It deals with the inhabitants of the Moro and other non-Christian provinces, and in the Christian provinces with adults who are unable to take advantage of the opportunities for industrial education offered in the public schools.

The term "sales agency" scarcely describes the most important work of the institution, for it has been found that it is the standardization of the product far more than the distribution that requires assistance and control. When the agency was founded, none of the handicrafts of the islands had been developed to the point of commercial soundness. Even embroidery, which appeared to be more advanced than any other, represented such a miscellaneous assortment of costs, materials, designs, and standards of execution as to be incapable of commercial classification. Due to the lack of uniformity in the different districts, the placing of orders for any considerable quantities was impossible. The state of affairs as regards other products was even worse. In this field substantial results have been accomplished during the year. In the case of embroidery, in place of 20 districts with at least that number of standards which formerly existed, there is now a single district whose product is fairly uniform, and large orders can now be placed with reasonable certainty as to prices, standards, and time.

The year's work was particularly interesting in connection with the School of Household Industries. After leaving the school the graduates work under the commercial direction of the sales agency. Representatives of the agency, of the executive bureau, and of the bureau of education have worked out a plan whereby their efforts toward the commercial development of worthy industries are facilitated and the maximum of harmony and smoothness of operation secured. Before returning to the provinces, the graduates spend several days at the agency, familiarizing themselves with the commercial details of their work. Arrangements have been made with the executive bureau whereby provincial boards are authorized to appropriate sufficient funds to finance the operations of these graduates in the provinces and are directed to furnish every possible assistance to the enterprise.

The belief that was at first entertained that the sales agency could within a short time be put upon a self-supporting basis has not proved to be well founded. It is not probable that the government should undertake this class of enterprise at all if it were not for the desirability of developing and advertising the industries concerned and of standardizing their products. Until this has been done, therefore, the question of the commercial profitableness of an institution like the sales agency is not the primary consideration.

At least four-fifths of the present activities of the agency relate to development work in the Christian provinces. This necessitates a class of expense which is not provided for in the legislation by which the institution was created, and which brings in no immediate profit.

EXECUTIVE BUREAU.

No important changes have taken place in the bureau during the year. It has been, as always in the past, most efficiently administered, and its activities continue to expand, though without material increase in the personnel.

The inconvenience and expense to which the Philippine Islands have long been put by reason of not producing a sufficient amount of rice and other food cereals for their own consumption, and the consequent importation of large quantities from abroad has frequently, in one connection or another, been made the subject of comment in the annual reports of successive governors general. The subject is discussed at some length in the last annual report, having assumed a particularly acute form during the fiscal years 1911 and 1912, owing to the serious shortages in the domestic rice crops of those years which followed an unprecedented drought. Reference was also made at that time to the measures taken by the insular government through the purchase and sale to the public of rice at a moderate price to prevent the forestalling of the market by a limited number of rice importers and the consequent charging of famine prices to the poorer class of the population. The necessity for the application of this remedy fortunately ceased with the promise for the season 1912-13 of an abundant domestic crop, estimated to be fully 100 per cent greater than that for the preceding year. The problem, however, remains substantially the same, and with a view to providing a remedy which would be more permanent in its operation, the Philippine Legislature on February 11, 1913, passed Act No. 2254, appropriating the sum of ₱400,000 to be used to increase the production of rice and other food cereals, and at the same time to provide for the equalization of the distribution of population in the islands by affording opportunities for emigration to the more thinly settled provinces, and the consequent bringing under cultivation of extensive areas of hitherto unused public lands. On March 10, 1913, the governor general appointed a board, of which the executive secretary is a member, to formulate and submit a plan for carrying out the act. This was done, and the work of establishing the first colony was begun at once. A suitable tract of land in the valley of the Cotabato River in the district of Cotabato, in the Moro Province, was selected, and the first shipment of colonists, mainly from the very densely populated province of Cebu, arrived there on June 15. This work is a new departure for the Philippine government, and it is impossible at this early stage to give a satisfactory account of all its details or to pronounce exactly to what extent it will prove an ultimate success. A full report is to be submitted to the legislature when it convenes in October.

During the year the policy of making loans to provincial and municipal governments for public works and permanent improvements has been continued. The total amount of loans made from insular funds to these governments has increased from ₱3,795,079.94 to ₱7,270,663.91. The loans made during the year reduced the amount available for such purposes to a small figure. Accordingly arrangements were made with the municipal board of the city of Manila for the investment of its sewer and waterworks bond sinking fund in this class of loans. This arrangement was advan-

tageous for the purposes of these loans because under the provisions of the act creating the fund in question loans may be made from it for any period; while, on the other hand, it is advantageous to the city because from a variety of causes it has been found difficult to invest all of the municipal sinking funds in approved securities. Under this arrangement loans to provincial and municipal governments for 10 years are made one-half from insular government funds, payable the first five years of the loan, and one-half from city of Manila funds, payable the last five. The insular government guarantees the city of Manila against loss by reason of such investments, and it has had no hesitancy in making this guarantee for the reason that no loans are granted until a thorough investigation by the executive bureau has proved beyond doubt the ability of the borrowing provincial or municipal government to repay.

The record of the provincial and municipal governments remains excellent. There has been no default of payment of either principal or interest during the year just closed, notwithstanding the fact that severe typhoons greatly reduced collections in several provinces during the early part of the year. The executive bureau continues to exercise a most careful supervision in order that the money loaned may be placed in the most advantageous manner possible; that installments of loans contemplated may be put to the credit of a given project as required by contracts entered into, and that no reserve shall be maintained in the trust funds of the insular government with the result of causing from its noninvestment an appreciable loss of interest. During the year 152 municipalities in 20 provinces were visited by a special agent of the executive bureau, and as a result of this investigation 59 reports were rendered and 62 loans made. In addition to these, recommendations for 19 provincial loans were made to the Governor General and approved. This section of the work of the executive bureau is conducted at a very low cost. The entire expense of salaries of those engaged in this work with traveling and sundry expenses for the fiscal year was but 0.00833 per cent of the total amount loaned.

A statement of all the loans granted, showing the relative amounts assigned for various classes of public works will be found in the report of the executive secretary. The erection of modern markets in the municipalities has continued to be the primary object of the loans made during this fiscal year. Ten such markets were completed and opened in the course of the year. The total cost of these was ₱235,787, of which the insular government loaned ₱187,500, the municipal governments appropriating ₱48,287. There are now 30 such markets under construction, for which loans amounting to ₱724,500 have been made. Twenty-six more projects have been approved by the Governor General, and are now in various stages of progress. For these, loans amounting to ₱293,000 have already been granted, and ₱391,000 more will ultimately be loaned in connection with them. The experience of the past year confirms all that was said in the last annual report of the executive secretary in regard to the financial advantages of investing the funds of the insular government in this class of public improvement. Figures given in the current report show that 7 municipalities in which modern markets have been constructed are receiving from market rents 24.4 per cent on a total investment of ₱190,000. Of this, 12.3 per cent con-

stitutes an increase over the receipts formerly collected before the erection of the new markets—an increase of revenue directly traceable to the policy of loaning insular funds for this purpose. None of these 7 municipalities are paying more than 3.27 per cent interest on the loans made them, and 4 of them are paying but 3 per cent.

Since June 1, 1913, the municipalities have been required to conduct their markets by administration instead of farming the privilege to a contractor, as had theretofore been the usual practice.

Along with the work of supervising the granting of loans and the construction of markets, a great deal of miscellaneous work has been accomplished in the course of the year, in providing for miscellaneous improvements in the municipalities, or in preparing the way for such improvements in the future as funds become available. A full set of maps of the central barrios of all municipalities in regularly organized provinces has been established. Plans have been prepared for the widening of streets and the introduction of sidewalks and park areas as they may gradually become practicable, so that when the bureau receives the news of a destructive fire or of severe damage by typhoon or other cause it can at once notify the local authorities to begin securing the necessary additional land for proposed improvements in the district affected, before new structures add to the expense. In the course of the year, moreover, work was begun to insure that all parcels of municipal land had been or would be without delay registered in accordance with the law. The consulting architect has prepared standard plans of different types of market buildings based upon careful study by the executive bureau of the operation of markets already installed, and also plans for reinforced concrete fireproof presidencias, or town halls. Municipal cemeteries are also being provided in some municipalities by means of loans. Care is taken in such cases that sites selected are high and easily drained, well outside of town, and on roads passable at all times of the year.

PROVINCIAL AND MUNICIPAL GOVERNMENTS.

There has been in general marked progress in the administration of the local governments. The number of provinces remains the same as in the last report—31 organized under the general provincial government act and 6 under the special provincial government act, the Moro Province being organized under its own special charter, Act No. 787. At the end of the year there were 739 municipalities organized under the municipal code, 93 townships and 26 settlements under the township government act, 15 municipalities in the Moro Province, and the city of Baguio under its own charter.

The fiscal year for the provinces and municipalities other than the city of Manila now coincides with the calendar year; all financial data in regard to these governments given in this report, as a consequence, relate to the provincial and municipal fiscal year 1912, the last for which complete figures are available. All provincial governments subject to the double cedula tax continued to maintain the optional double rate for the year 1912. The revenue from this source was ₱1,790,211.10. This sum accrues to a fund available only for the construction and maintenance of roads and bridges. There were received in the course of the year 26 requests for the extension of the time of payment, without penalty, of the land tax and 15 for the post-

ponement of the cedula tax; of the former 8 were granted and of the latter 2. Detailed statements showing the financial condition of the provinces and municipalities during 1912 as compared with 1911 will be found in the report of the executive secretary. These figures show an increase in the fixed assets of the provinces from ₱28,757,-534.04 to ₱35,271,815.83. The following condensed statement shows the revenue derived by the provinces in 1911 and 1912 from the cedula, internal revenue, and land tax, the chief sources of provincial income:

	1912	1911
Cedula.....	₱2,746,889.15	₱2,691,619.35
Internal revenue percentage.....	1,730,230.12	1,692,524.33
Land tax.....	1,181,216.94	1,122,586.42

The total municipal income for the year 1912 was ₱6,800,620.57, as compared with ₱6,574,281.67 for the preceding year. This increase is quite evenly distributed among the various sources of income. The items of rents, profits, and privileges, to which rents from municipal markets accrue, show an income for the year 1912 of ₱865,752.52, an increase of ₱70,301.75 over that of 1911 and of ₱120,592.56 over that of 1910. This increase is due in a large measure to the erection of modern sanitary markets through the aid of insular loans, as discussed above. Loans were made by the provinces to municipalities during the fiscal year in the aggregate sum of ₱61,574.

The policy has been continued of establishing as independent municipalities communities which once possessed that status, but which, owing to untoward financial conditions in the early years of the American government, proved unable to maintain separate municipal administrations and had, in consequence, to be fused with neighboring municipalities. The lowest point in the number of municipalities was reached in 1905, when it stood at 597. This reduction was absolutely necessary at the time for economic reasons, but it was a blow to local pride, and wherever the community of the abolished municipality has felt able to resume the burden of self-government, it has promptly petitioned for segregation. The small self-governing unit has much to commend it from the point of view of general governmental policy, and, as a consequence, the policy has been for the Governor General to grant such petitions under the power given him by Act No. 1748, with somewhat stringent conditions to guard against the squandering of limited municipal incomes on unnecessary salaries or ephemeral projects. During the year 16 new municipalities and 2 townships were created. All but 3 of the municipalities were at some previous time independent.

As stated in another part of this report, the conditions of law and order over the provinces as a whole have been excellent. The improvement of the last few years has been especially noticeable in the rugged interior country of the island of Samar, where conditions continued to be unsatisfactory for a longer period than anywhere else in the Christianized provinces. By Act No. 1759 a lieutenant governor was appointed with jurisdiction over these people, reporting to the Governor General. There have now been established in this

region 7 rancherias, each with its presidencia and school building, and teachers have been or soon will be supplied. All the municipal officials are serving without pay, except one presidente, who draws ₱7 a month. Taxes are being collected, and the collections are steadily increasing. Agriculture, though it has had severe setbacks, is practiced to an extent never before attempted.

The financial resources of many municipalities have not been sufficient to permit them to undertake necessary public works or even in some cases satisfactorily to operate their schools. The people have shown a commendable willingness to contribute money, material, and labor for these purposes, but this method of providing for public works and services is, despite all safeguards, open to abuse. It will probably be advisable, therefore, to secure legislation whereby municipal councils, which are elective bodies, may of their own volition increase the rates of certain taxes for limited periods of time to enable them to accomplish specified public works, at least upon receiving executive approval.

Other matters connected with the administration of the provinces and municipalities are discussed elsewhere in this report under various heads of governmental action.

BUREAU OF CIVIL SERVICE.

The work of this bureau continues to bring out the steady progress that is being made in the increase of the English-speaking Filipino element in the civil service as rapidly as qualified individuals can be found. The total number of Americans examined and that of Filipinos examined in Spanish were less than during any preceding year. The number of Filipinos examined in English, on the other hand, increased from 5,736 in 1912 to 7,755, or 35 per cent. The total number of persons examined during the year was 9,251, an increase of 25 per cent; this is by far the largest number ever examined in one year.

Eight Filipinos qualified in the junior stenographer English examination, and one, the first to do so, in the senior. Many stenographers' positions for which men had formerly to be brought from the United States are now filled by the appointment of Filipinos. Of the Filipinos examined, 89 per cent took examinations in English and 11 per cent in Spanish. As most of the applicants have free choice in the matter, these percentages are a real index of the progress of English as a working language in the islands. Only 10 years ago 97 per cent of the Filipinos examined took examinations in Spanish. The examining division was heavily taxed during the year, but by extra service, cheerfully given, the work was brought up to date.

This year an innovation was made in the introduction of assistant technical examinations, as a solution of the problem presented by the situation of a considerable number of employees who had been appointed as the result of passing a junior technical examination and had reached the maximum salary allowed in consequence. Many of them, while not having had sufficient technical education to pass the senior technical examination, had been extremely skillful and efficient, and could have commanded better positions in private life had further promotion continued to be blocked. Examinations were consequently prepared for positions such as assistant draftsman, assistant

forester, and so forth, of intermediate difficulty as compared with the former senior and junior grades. They fill a real need.

The various training schools for the civil service which have been established from time to time have been increasingly successful in operation. During the past year, 38 of the 45 graduates of the Normal School were appointed junior teachers; 13 of the 14 graduates from the course in surveying were appointed junior surveyors; 26 of the 27 graduates from the School of Forestry were appointed rangers; all of the 35 graduates from the Philippine Training School for Nurses were appointed to positions; and 93 who completed their apprenticeship in the Bureau of Printing were appointed junior craftsmen. Formerly all surveyors and nurses and many other technical employees had to be brought from the United States.

Since the year 1908 the Philippine Commission has been authorized by act of Congress to appoint one cadet each year to the United States Military Academy at West Point. The practicability of securing suitable young men for appointment has been recently increased by an alteration in the physical requirements which takes account of the slighter average physique of Filipinos. During the past year 6 persons were designated for examination to select 2 cadets to enter the academy in June, 1913, but only one of them passed. One of this year's vacancies therefore remained unfilled, and another will occur in June, 1914; but for the examination announced for the purpose of securing candidates in May only 2 persons appeared, and it has therefore been postponed. This failure to secure wide competition is regrettable. The first Filipino cadet graduates in June, 1914. There are now 4 in the academy, and no appointee has yet been discharged for failure in studies or conduct.

During the past year 1,031 persons were appointed to the civil service as the result of examinations held in the islands, an increase of 26 per cent. The number of Americans appointed was 117, 25 more than during the preceding year. This increase was entirely due to bringing the American police force of the city of Manila up to its authorized strength. The number of Filipinos appointed as the result of English examinations increased 33 per cent, while the number of those appointed as the result of examinations in Spanish decreased 21 per cent. Eighty-nine per cent of the appointees from examinations held in the islands were Filipinos, while in 1902 the percentage was 48. The number of Americans brought from the United States for classified positions decreased from 243 to 156, and of the latter 102 were for the teaching service. To the unclassified service 74 appointees were brought from the United States, 60 of them being constabulary officers. There were in the course of the year 3,243 appointments by promotion, reduction, reinstatement, and transfer. The number of Americans promoted was 711, 248 fewer than during the preceding year, while the number of Filipinos promoted was 1,964, 281 more than during the preceding year. Of the Filipinos promoted 1,431 had passed English and 533 Spanish examinations.

On January 1, 1913, of the 8,986 permanent officers and employees of the Philippine civil service 2,623, or 29 per cent, were Americans, and 6,363, or 71 per cent, were Filipinos. These proportions are the result of progress from the 51 per cent of Americans and 49 per cent of Filipinos in 1903. Even as compared with the preceding year, the

percentage of Filipinos had risen from 69 to 71. During the year 17 per cent of the American officers and employees resigned from the service, and 2 per cent were separated by death or removal.

The proposed retirement bill prepared by the bureau of civil service was referred by the Governor General to a committee consisting of the attorney general, the director of lands, and an assistant auditor. This committee has not yet made its report.

No legislation unfavorable to the stability of the civil service was enacted during the year. As a whole, the large increase in the number of persons taking the examinations resulted in a material increase in the number of well-qualified eligibles obtained, with a corresponding improvement in the appointees. The tendency to resist the application of the merit system which was observable in the early years of the American Government, has now disappeared, and there is practically always hearty cooperation between the bureau of civil service and the other officers of the government.

CITY OF MANILA.

The administration of the affairs of the city has been conducted without important changes during the year, except in personnel. On December 1, 1912, Mr. Percy G. McDonnell resigned his membership in the municipal board, which he had held continuously since 1902. The vacancy thus occurring was filled by the promotion of Mr. John C. Mehan, who held the position during the remainder of the year.

The secretary of the municipal board was on leave in the United States during a portion of the year, and advantage was taken of this to have him make there an investigation of laws and ordinances relating to special assessments. The development of the street system of Manila has been much hampered by the absence of some such method of securing part of the necessary funds. An act, No. 2257, was passed at the last session of the legislature which, among other provisions amending the city charter, authorized the collection of special assessments. It is believed that this system, which exists in every city of any importance in the United States, will not only make possible the more rapid improvement and embellishment of Manila, but will speedily lead to the reimbursement of the property owners through the increase of real estate values in the districts affected.

Other provisions of the act just referred to enlarge the powers of the collector of internal revenue, acting as city assessor and collector, in the assessment and collection of the real estate tax, and fix the rate of that tax permanently at $1\frac{1}{2}$ per cent of the assessed valuation. This is the rate which has been regularly collected in practice since 1902, but it has hitherto been in the power of the municipal board to regulate it, up to a maximum of 2 per cent. By Act No. 2200 the municipal board ceased to exercise the functions of a board of tax appeals, a new body being constituted for the purpose.

Material progress has been made in the development and improvement of the street system. Of the money expended, a large portion was put into the acquisition of land for a new business street parallel with the Escolta, which will relieve the extreme congestion of the retail district. The improvement of this property has only just begun. It having been found that, owing to increasingly heavy

traffic, the tropical rainfall, and the poor quality of the stone available, ordinary macadam is very unsatisfactory as surfacing for such of the city streets as are subjected to the hardest use, extensive experiments have been made with a variety of tar macadam, and this has proved much more durable. Its initial cost is somewhat greater, but it is believed that on account of decreased maintenance expense, it will in the long run be found much cheaper, and will greatly improve the condition of the streets. The area laid with it is being increased as rapidly as possible on the main arteries of traffic. Toward the end of the year about a third of the existing street surface was placed under a modified form of the system of caminero maintenance, which has proved so successful on provincial roads. As far as can be observed at present, it is likely to prove entirely satisfactory.

During the year there were issued 7,576 private building permits for construction of an estimated value of ₱3,711,500. Of this, strong-material buildings of new construction accounted for ₱2,938,318; and of this latter, ₱617,000 was represented by concrete buildings. Notwithstanding a slump in building operations during the year, the total compares favorably with that for 1912. There was completed during the year the first modern concrete office building in the city, and a number of similar structures are projected or under construction.

A beginning was made on a long-projected class of improvements, closely connected with public sanitation, by the construction of a model public laundry and bath building. This has proved very popular, and it is planned to erect others in suitable locations in the city. As a part of this program an ordinance has been passed prohibiting the washing of clothing in public waterways—hitherto a widespread custom with the poorest class. A new 20-room concrete primary school building was completed during the year, and a new market for the Tondo district, to serve especially for the fish trade. Just after the end of the year a start was made on the new Central School.

The distribution system of the Manila Gas Corporation is now nearly completed, and the producing plant is under construction. An ordinance regulating the supply of gas, prepared after a careful study of American and British practice, is under consideration. It is expected that the company will be prepared to deliver gas before the end of October, 1913. In connection with the installation of the gas service a question, still undecided, has arisen as to the right of the company, in view of the contract of the city with the old Spanish electric lighting corporation, to submit a bid for street-lighting. The opinion of the attorney general has been requested.

The condition of public order has been good. The epidemic of petty thievery, which reached an undesirable height in 1912, has diminished, although the increase since 1910 seems to be more or less permanent. This emphasizes the crying necessity for a habitual criminal law, such as that which failed of passage at the last session of the legislature. The police and law departments have accomplished their work with smoothness and efficiency. None of the few strikes which occurred were attended with any public disorder.

The situation in regard to fires in Manila is not satisfactory, although the fire department is most efficient. Considering the size of the city, an abnormal proportion of the buildings in the closely

built business sections are of very inflammable construction, and the work of replacing them with modern structures has lagged far behind the progress of Manila in other respects. The number of large fires has tended to increase of recent years, and during the year just closed was the highest recorded. The total loss was less than for 1912, but was exceeded only by the figures for that and for one other year since the establishment of the American Government. Closely connected with this is the situation in regard to fire insurance. An unduly large proportion of the fires occur under conditions which point to incendiary origin and to a reckless assumption of insurance risks as a cause. This has inevitably led to very high insurance rates, and there has recently been talk of a number of companies withdrawing altogether from the chief retail district. Legislation is likely to be needed to encourage or require better methods of construction and to regulate the placing of insurance, and the matter is now being investigated. A measure already actually under discussion is an ordinance regulating and in some cases requiring the building of firewalls in the district most seriously affected. The subject of fire escapes is also engaging the attention of the city authorities. There has fortunately been little loss of life in connection with the fires that have occurred, but the danger is undoubtedly considerable. Important improvements in fire protection have been made in the course of the year: First, in an arrangement with the bureau of navigation to fit up certain of its launches with special pumps, with a view of filling partially the long-felt want of a fire boat; and second, in the motorization of the apparatus of the department, for which a complete outfit has been purchased, though most of it had not been received at the end of the year. This will be an economy, as high-grade horses are expensive in Manila, and their period of usefulness is short.

Work has continued on the parks and open spaces of the city throughout the year, though mostly in the way of minor improvements. Three playgrounds were graded and put in first-class condition, and two of them equipped with suitable apparatus. They have been increasingly popular, and a playfield instructor has been detailed from the Bureau of Education to supervise them. Good progress has been made on the improvement of the moat area around the Walled City.

A change has been made in the system of collecting garbage and refuse by advertising for bids from private concerns to undertake the work. The contract was let to the sole bidder, who agreed to use motor trucks for collection and to establish a reduction plant, at a satisfactory figure.

A good deal of progress has been made in filling in the extensive low lands of the city by making use of street refuse, properly covered and disinfected. The work of mosquito extermination is now on a permanent basis, and largely accomplishes its purpose except where excessive rains or abnormally high tides flood large tracts of low land. The conditions then existing can be remedied only by the permanent filling to grade of the area affected.

The system of public markets for perishable foods is increasingly successful, and the market revenues show steady gains. The water service has been satisfactory. There was no excessive drought during the dry season, and it has not been necessary to have recourse

to any water other than that from the uninhabited watershed. Advantage was taken of the time when the water was at its lowest to make improvements, including the construction of a flume, which greatly reduce the waste. The consumption, however, has increased so far beyond all estimates that some extension of the storage facilities is already needed, and will be imperative within a few years. Several suitable locations for the development of new reservoirs have been investigated. The number of connections with the sanitary sewer system has materially increased, especially as a result of the action of the Supreme Court in dissolving the injunction of the court of first instance in the case of *E. W. Case v. The Board of Health of Manila*, which had interdicted the compulsory requirement of sewer connections. The number of connections which should be made is still, however, large.

The progress made in the development of the port district during the year is discussed, so far as the port works proper and the installation of the street system are concerned, in the report of the secretary of commerce and police. In the matter of leasing available lots satisfactory progress is to be recorded, and at the end of the year, out of a total of 98 blocks, 48 had been reserved for various purposes, 7 had been actually leased, 22 had been awarded but the lease not executed, and 16 had been advertised without bids being received; while for the remaining 5 detailed information was not at hand. The utilizing of the land for building, however, proceeds very slowly. This is partly because of the general business depression of the last few months, but largely because the business men of the city will not be willing to sink their capital in buildings on this tract until more definite steps have been taken to make certain improvements, such as its connection with the railroad and the erection of a customhouse. The latter project awaits the securing of the necessary funds. There has, however, been one well-equipped marine railway and engineering shop constructed in the district during the past year, which will supply much needed facilities for this class of work and make the islands somewhat less dependent, in this important respect, upon other ports.

Various matters of interest which are not touched upon in this report, or are only briefly mentioned, are discussed at length in the report of the Philippine Commission, in those of the several secretaries of departments, or in that of the executive secretary. In conclusion, it may be said that, despite some inevitable setbacks, the year has been a prosperous one in the Philippines, and that distinct advancement is to be recorded in nearly every line of work undertaken by the government.

Very respectfully,

NEWTON W. GILBERT,
Acting Governor General.

To the PHILIPPINE COMMISSION,
Manila, P. I.

REPORT OF THE EXECUTIVE SECRETARY.

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
EXECUTIVE BUREAU,
Manila, September 15, 1913.

SIR: I have the honor to submit my report for the year ending June 30, 1913.

The executive bureau was created July 16, 1901, by Act No. 167 "To assist the civil governor (Governor General) in his executive duties." It is settled that under this provision the act of the executive secretary "is to be construed as the act of the Governor General." This makes the executive secretary and his assistants additional right hands of the Governor General and throws into the bureau much work incidental to the action by law required of his office. It also makes the bureau the state department of the government insofar as the government needs a state department. In the matter of conducting correspondence or negotiations with foreign consuls here, American consuls everywhere, or neighboring governments, the executive bureau distinctly fulfills the purpose of a state department. It also attends, on behalf of the Governor General, to matters properly within the sphere of government that are not by law assigned to some other department or office. To prevent misunderstandings and cross purposes and so to save time and trouble, all communications from offices of this government to the United States on any subject are required to be sent through this bureau, which sends them to the Bureau of Insular Affairs for dispatch. That bureau reciprocates, so far as possible, with regard to communications from offices and individuals in the United States. The range of subjects covers the whole field of human activity. Similarly, all correspondence each way, between offices of the government and the Army or Navy stationed in the islands passes through the executive bureau. By Act No. 222, passed in 1901, it was provided that the official correspondence of the heads of departments might be recorded in the executive bureau, which was required to furnish needed clerical assistance to them. This and its relation to the Governor General has resulted in making the bureau the coordinating center of the government, not in the sense of controlling or directing the activity of any department or office, but in securing cooperation and preventing duplication of effort.

The executive secretary and bureau are also specifically charged by statute with many other duties, which in practice are not distinguished from those derived from the Governor General.

The executive secretary himself must keep in intimate personal touch on one hand with the policy, intentions, and needs of the Governor General, and on the other with every activity of the bureau.

To accomplish the whole the executive secretary has a first and second assistant, who act in his place according to rank in the absence of a superior, and three special agents. The assistant executive

secretary normally has charge of matters of a legal or foreign character and direct though not final supervision of the chief clerk in matters of system and personnel. The second assistant, who was formerly chief of the bureau of archives, now merged with this bureau, and known as the division of archives, patents, copyrights, and trade-marks, has charge of the archives, as distinguished from records, of matters affecting the registration and governmental record of domestic and foreign corporations, of all records and questions affecting patents, copyrights, trade-marks, and of the registration of horses and cattle, besides the dispatch of a large amount of routine correspondence. The special agents have supervision over the financial and economic administration of the provinces and municipalities, and the very important matters of planning and initiating civic improvements and the investigation of proposed loans to provinces and municipalities of government from trust funds for such improvements.

The subordinate force consists of a chief clerk, who has direct charge of bureau personnel, property, funds, and discipline with his own office force of 84 people and 6 divisions, each under its own chief, whose work is hereafter set forth in more detail. Appendix "A" gives an outline of the bureau organization.

REDISTRIBUTION OF POPULATION AND PROMOTION OF RICE CULTIVATION.

On February 11, 1913, the Philippine Legislature, in Act No. 2254, appropriated ₱400,000 to be used—

- (a) To increase the production in these islands of rice and other food cereals which at present are imported in large quantities for local consumption.
- (b) To equalize the distribution of population of these islands.
- (c) To afford opportunity to colonists to become landed proprietors and to bring under cultivation extensive wild public lands.

On March 10, 1913, the Governor General, by executive order No. 29, appointed a board, of which the executive secretary is a member, to formulate and submit a plan for carrying out the act. The board promptly submitted an outline plan, which was approved by the Governor General, and the work of establishing the first colony was begun at once. An adequate tract of public land in the Cotabato Valley, Moro Province, was selected, and the first shipment of colonists arrived there on June 15.

The arrangement of the details of this scheme involved a great amount of careful planning along a line of work absolutely new. A full report is to be submitted to the legislature which convenes in October next.

SPECIAL AGENTS.

The entire time of the senior special agent is taken up with the administration of provinces and municipalities on the economic side.

These governments on June 30 comprised 31 provinces organized under the general provincial government act and 6 under the special provincial government act, the Moro Province organized under its own special charter, Act No. 787. There were 739 municipalities under the municipal code, 93 townships and 26 settlements under the township government act, 15 municipalities in the Moro Province, and the city of Baguio under its own charter.

FINANCES.

The finances are generally in satisfactory condition, as is shown by the following statements:

Condensed general balance sheet—Provinces.

	Dec. 31, 1912.	Dec. 31, 1911.
ASSETS.		
Available assets:		
Cash, accounts receivable, and supplies.....	P4,881,955.18	P2,660,559.90
Special and trust fund assets.....	4,597,844.77	3,942,689.50
Loans to municipalities.....	126,253.18	119,373.47
Exchange stores.....	18,500.00	
Fixed assets: Plant and equipment.....	35,271,815.83	28,757,534.04
Total assets.....	44,896,368.96	35,480,156.91
LIABILITIES.		
Current liabilities:		
Accounts payable.....	640,235.92	882,848.68
Special and trust fund liabilities.....	4,597,844.77	3,942,689.50
Loans payable.....	3,693,880.54	1,014,394.97
Term obligations.....	30,000.00	
Total liabilities.....	8,961,961.23	5,839,933.15
SURPLUS.		
Unappropriated.....	3,113,823.11	
Unappropriated.....	1,127,896.15	1,777,711.22
Principal account (represented by loans to municipalities, exchange stores, and fixed assets, less loans payable and term obligations).....	31,692,688.47	27,862,512.54
Total surplus.....	35,934,407.73	29,640,223.76
Total liabilities and surplus.....	44,896,368.96	35,480,156.91

Attention is drawn to the increase in fixed assets from P28,757,534.04 at the close of 1911 to P35,271,815.83 at the close of 1912.

The items constituting these assets are as follows:

	Dec. 31, 1912.	Dec. 31, 1911.	Increase.
Real estate.....	P522,849.32	P458,055.78	P64,793.54
Real estate, school.....	179,203.73	133,314.81	45,888.92
Buildings.....	3,429,761.85	2,931,986.95	493,774.90
School buildings.....	1,884,455.63	1,814,521.50	69,934.13
Roads, bridges, and ferries.....	26,139,047.43	20,798,424.11	5,340,623.32
Parks and monuments.....	35,495.36	20,794.99	14,700.37
Irrigation works.....	10,098.50	258.66	9,839.84
Waterworks and artesian wells.....	185,719.97	142,238.13	43,481.84
Telegraph and telephone lines.....	120,394.72	96,875.80	23,518.92
Docks and wharves.....	340,978.87	291,483.17	49,495.70
Equipment.....	2,427,810.45	2,069,580.14	358,230.31
Total.....	35,271,815.83	28,757,534.04	6,514,281.79

The practice of making loans to the provinces from insular investment funds for the construction of public works continued throughout the year.

As shown by the foregoing balance sheet, the aggregate amount of such loans to the provinces upon December 31, 1912, was P3,693,880.54, as against P1,014,394.97 upon December 31 of the preceding year. For the expenditure of this money first-class roads, bridges, permanent public buildings, and other public utilities have been acquired, as evidenced by the increased fixed assets—plant and equipment—shown in the balance sheet and hereinbefore commented upon.

Condensed general statement of income and expenditures—Provinces.

	1912	1911
INCOME FROM OPERATION.		
Revenue from taxation.....	P 6,518,800.23	P 6,614,708.25
Sundry revenue.....	264,058.22	249,976.09
Total income from operation.....	6,782,858.45	6,864,684.34
OPERATION EXPENDITURES.		
Administration.....	2,874,975.84	2,671,194.63
Maintenance.....	1,907,697.86	1,797,328.76
Total expense of operation.....	4,782,673.70	4,468,523.39
Net income from operation.....	2,000,184.75	2,396,160.95
Other receipts (aid and loans from insular government, etc.).....	5,532,375.15	2,228,309.12
Balance at beginning of year.....	1,777,711.22	903,552.04
Total.....	9,310,271.12	5,528,022.11
CAPITAL EXPENDITURES.		
Plant.....	4,203,556.82	3,613,413.17
Equipment.....	399,435.66	368,779.73
Supplies and sales stock.....		(451,175.44)
Total capital expenditures.....	4,602,992.48	3,531,017.46
Other payments (loans to municipalities and repayment of insular loans).....	465,559.38	219,293.43
Balance at end of year.....	4,241,719.26	1,777,711.22
Total.....	9,310,271.12	5,528,022.11

The items going to make up the foregoing figures will be found in Part II of the auditor's report. Those pertaining to cedula, internal revenue, and the land tax—the chief sources of provincial income—are of especial interest. The income from these sources for the fiscal year 1912 was as follows, as compared with the fiscal year 1911:

	1912	1911
Cedula.....	P 2,746,889.15	P 2,691,619.35
Internal-revenue percentage.....	1,730,230.12	2,074,499.57
Land tax.....	1,181,216.94	1,122,586.42

The internal-revenue percentage accruing to the provinces apparently shows a decrease, whereas the fact is that there was an increase in this item. The percentage of internal revenue due the provinces is paid to them from the insular treasury quarterly. The payment accruing for the last quarter of the year 1910, amounting to **P**381,975.24, was not deposited to their credit until January 1, 1911, and hence appeared in the revenue of that year, inflating it by that amount at the expense of the figures for the year 1910.

A correct comparative showing of this revenue for the years 1912 and 1911 is as follows:

Internal revenue—auditor's report 1911.....	P 2,074,499.57
Warrant for quarter ended Dec. 31, 1910.....	381,975.24
True revenue for year 1911.....	1,692,524.33
Internal revenue—auditor's report 1912.....	1,730,230.12
Increase 1912 over 1911.....	37,705.79

Interest-bearing deposits yielded a revenue of ₱132,035.84. The amount on interest-bearing deposit December 31, 1912, was ₱5,045,500.

The customs collections at the ports of the Moro Province, the largest source of revenue of that Province, amounted to ₱462,374.90 in 1912, as compared with ₱427,695.20 in 1911.

All provincial governments subject to the double cedula tax continued to maintain the optional double rate for the year 1912. The revenue from this source, included in the figures above, was ₱1,790,211.10. This sum, in accordance with law, accrues to a fund available only for the construction and maintenance of roads and bridges.

Condensed general statement of income and expenditures.

MUNICIPALITIES.

	1912	1911
INCOME FROM OPERATION.		
Revenue from taxation:		
General fund.....	₱3,618,655.65	₱3,381,075.84
School fund.....	1,535,421.21	1,461,086.70
Sundry revenue:		
General fund.....	1,625,585.24	1,705,195.59
School fund.....	5,880.29	12,379.49
Cemetery fund.....	15,078.18	14,544.05
Total income from operation.....	6,800,620.57	6,574,281.67
OPERATION EXPENDITURES.		
Administration:		
General fund.....	3,588,988.88	3,432,936.75
School fund.....	1,327,953.58	1,416,866.62
Cemetery fund.....	28.50	718.86
Maintenance:		
General fund.....	442,156.55	459,512.65
School fund.....	32,701.35	34,469.21
Cemetery fund.....	18,580.25	11,737.67
Total expense of operation.....	5,410,419.11	5,356,241.76
Net income from operation.....	1,390,201.46	1,218,039.91
Other receipts (aid from insular government and aid and loans from provincial governments).....	187,229.23	154,693.20
Balance at beginning of year:		
General fund.....	1,586,583.96	1,455,064.45
School fund.....	801,006.00	880,775.18
Cemetery fund.....	37,980.01	34,678.31
Total.....	4,003,000.66	3,743,251.05
CAPITAL EXPENDITURES.		
Plant:		
General fund.....	611,931.96	501,645.55
School fund.....	459,582.75	484,898.98
Cemetery fund.....	580.56	1,377.11
Equipment:		
General fund.....	191,208.00	198,852.92
School fund.....	42,555.28	42,619.19
Cemetery fund.....		40.00
Total capital expenditure.....	1,305,958.55	1,229,433.75
Other payments (provincial loans, etc.).....	112,799.11	88,274.53
Balance at end of year:		
General fund.....	1,606,441.33	1,586,583.96
School fund.....	934,853.92	800,978.80
Cemetery fund.....	42,947.75	37,980.01
Total.....	4,003,000.66	3,743,251.05

The items going to make up the foregoing figures will be found in Part III of the auditor's report.

The following shows the chief items of municipal revenue for the fiscal year 1912, as compared with those for the fiscal year 1911:

	1912	1911
Cedulas.....	₱920,324.55	₱913,458.45
Licenses, internal revenue.....	566,229.19	445,782.76
Internal-revenue percentage.....	1,448,912.22	1,365,744.76
Land tax.....	1,543,415.10	1,467,850.57
Licenses, municipal.....	543,776.51	545,378.82
Fisheries.....	250,859.15	230,405.29
Cattle registration.....	404,637.00	289,200.30
Rents, profits, and privileges.....	865,752.52	795,450.77

As appears, the total municipal income for the year 1912 was ₱6,800,620.57, as compared with ₱6,574,281.67 for the previous year, an increase of ₱226,338.90. This increase, it will be observed, is quite evenly distributed among the various sources of income. Rents, profits, and privileges, to which rents from municipal markets accrue, show an income for the year 1912 of ₱865,752.52, an increase of ₱70,301.75 over that of the year 1911, and of ₱120,592.56 over that of 1910. This increase is due in a large measure to the erection of modern sanitary markets through the aid of insular loans, which subject is hereinafter more fully discussed.

Loans were made by the provinces to municipalities during the year ending December 31, 1912, aggregating ₱61,574. The account upon that date stood as follows:

Balance due provinces, Jan. 1, 1912.....	₱119,686.73
Loans made during year.....	61,574.00
Total.....	181,260.73
Loans paid during the year.....	51,105.45
Balance due provinces Dec. 31, 1912.....	130,155.28

Loans to municipalities from insular investment funds are not taken up or disbursed through municipal accounts, but by the provincial treasurers as special funds. This subject is, therefore, dealt with further on.

In 1902 and 1903 provincial conditions were such that many of the municipalities were unable properly to govern themselves or to raise the money absolutely necessary to pay salaries and provide even an apology for municipal service. In consequence, a large number were fused by acts of the Commission. The lowest point was reached in 1905, when from the original 1,035 the number was reduced to 597.

This resulted in economic benefit to the localities, but was a blow to local pride, and, in consequence, whenever the community of the abolished municipality has felt able to resume the burden of self-government it has promptly petitioned for its reerection. The small self-governing unit has much to commend it and, where it seemed proper, the policy has been for the Governor General to grant the petition under the power given him by Act No. 1748, with rather stringent conditions to prevent squandering limited income on unnecessary salaries or ephemeral projects. During the year 16 new

municipalities and 2 townships were created. All but 3 of the municipalities were at one time independent municipalities, and these 3 were outlying barrios whose population and resources had grown to a point where they were entitled to separate existence. In order to prevent so far as possible double jurisdiction of civil and naval authorities, the municipality of Olongapo, within the reservation of that name, was abolished on April 1, and the civil authority transferred to the municipality of Subic.

The provincial government act and the special provincial government act provide that the provincial boards of Provinces organized thereunder may, by resolutions approved by the executive secretary, authorize the heads of their various offices to appoint and fix the salaries of such assistants, clerks, and other employees as the public interests require. The provision requiring the approval of this office to these resolutions is for the purpose of securing uniformity of provincial organization and economy in the operation of these governments. The boards are required, before the beginning of each year, to submit lists of the personnel proposed for the ensuing year, showing the salaries and allowances contemplated to be paid. These lists are locally termed *plantillas*, and are to provincial governments what the appropriation bill is to the insular government, in so far as the personnel, salaries, and allowances to be paid for this service are concerned. In their consideration particular attention is paid to the class, importance, financial condition and special needs of the Province concerned, and while, as in the case of the insular appropriation bill, the *plantillas* are approved for fiscal years, changes are authorized from time to time during the year, as necessity arises. During the year covered by this report, 661 changes in the approved *plantillas* were authorized.

Section 12 of the provincial code requires that all provincial resolutions and executive orders be sent to this office. Under section 41 of the municipal code the provincial board by resolution approves or disapproves all municipal ordinances. The result is that the executive bureau keeps informed as to what these governments are doing, preserves a copy of their records, against the possible destruction of the originals, and is often enabled to intervene in a friendly way and prevent error.

The provincial boards, in passing upon municipal resolutions, ordinances, and executive orders, refer to them in their own minutes by date, number, and title or purpose. In the review of the minutes of provincial boards in this office, if their action in this respect, in approval or disapproval, appears to be questionable, a complete copy of the questioned resolution, ordinance, or executive order is sent for, and, if after inspection it is found to be illegal or improper, the provincial board is requested to annul it at its next meeting.

Three clerks are assigned to this work and in the year reviewed 29,900 provincial resolutions, discovering faults which required the annulment of 136 ordinances and 7 executive orders.

The efficacy of the constabulary in the field, followed up by its able support of the provincial officials, has resulted in changing the problem of the pulahans in the mountains of Samar from one of public order and repressive force into one of guidance and evolution by the civil authorities. By Act No. 1759 a lieutenant governor was

appointed with jurisdiction over these people, who reports to the Governor General. It is gratifying to be able to say that there are now established 7 rancherias, each with its presidencia and school building, and teachers have been or soon will be supplied. All the municipal officials are serving without pay except one presidente, who draws ₱7 a month. Taxes are being collected and the collections are steadily increasing. Agriculture, although it has had several setbacks by typhoon, drought, and locusts, is practiced to an extent never before attempted. In general, the situation in this respect is very satisfactory.

With the approval of the Governor General, and under the provisions of section 13 (nn) of the provincial government act, provinces may loan to municipalities any of their funds in excess of their just debts and liabilities falling due within a fiscal year, except those funds the use of which is otherwise specifically fixed by law, with interest at the rate of 3 per cent per annum. Loans aggregating ₱57,574 were granted during the year.

The financial resources of a great number of municipalities have not been sufficient to permit them to undertake necessary public works, such as the construction or repair of schoolhouses, municipal government buildings, roads, bridges, and in some cases the operation of their schools. The people, however, have shown commendable public spirit by voluntarily contributing money, material, or labor for these purposes. To prevent ignorant people becoming the object of abuse by unscrupulous officials, the acceptance by municipal governments of such contributions, without previous executive authority, has been absolutely prohibited. One hundred and seventy-one requests that such contributions be permitted for various purposes were received during the year, and after due investigation were granted with few exceptions.

It is desirable, however, that legislation be had whereby municipalities may temporarily increase certain taxes, the proceeds thereof to be devoted to such public works as are specified in the ordinances directing their collection. With all the safeguards that can be thrown around the matter, the solicitation and taking of subscription from the public for these purposes is open to abuse and doubtless is abused in many cases. If a municipal council—an elective body—is willing to increase the rate of taxation, upon land for instance, for a period of time, to enable it to build a school or the municipal building, or to accomplish some other public work, it would seem that it should be permitted to do so, at least upon receiving executive approval.

Buildings and property owned by provinces and municipalities may be insured against loss on account of fire, storm, or earthquake under the insurance fund created by Act No. 1728. Such insurance is granted upon application of the provincial board or municipal council concerned, at rates fixed by the insular auditor, with executive approval. At the close of the fiscal year insurance to the amount of ₱531,000 was carried by the provinces and ₱20,000 by the municipalities upon their buildings and property. The insurance fund was not called upon to make good any losses on account of its provincial and municipal risks during the year.

By section 13 (nn) of Act No. 83, provincial boards are given the power, with the approval of the Governor General, to extend the time for payment, without penalty, of the real property and the cedula

taxes. The following table shows the number of cases handled during the year covered by this report:

Kind of tax.	Number of requests received.	Granted.	Denied.
Real property.....	26	8	18
Cedula.....	15	2	13

Section 13 (nn) of the provincial government act authorizes provincial boards, with the approval of the Governor General—

To provide, in its discretion, for the payment from provincial funds of their regular compensation during the period of their disability, not exceeding ninety days, to unclassified employees of the provincial government, including laborers, when said employees or laborers are injured in the clear line of duty; the necessary expenses of medical attendance, transportation, and hospital fees for such injured employees or laborers; and in case of their death from said injuries, their reasonable burial expenses may likewise, in the discretion of the provincial board, be paid from provincial funds.

Payments in 23 instances were approved under this provision of law.

Section 61 (b) of the municipal code provides that—

Any interested person or official dissatisfied with the action of the provincial board of tax appeals may appeal to the executive secretary, whose decision shall be final.

This legislation was superseded, February 11, 1913, by that contained in Act No. 2238, which, after stating that appeals in real property tax matters may be taken to municipal councils and provincial boards, provides—

That the executive secretary, in case of appeal by any municipality or proprietor, shall have the power to revise said assessment and modify and correct all defects with regard to fairness found therein, and his decision in such case shall be final.

Under these two provisions of law 275 appeals were received and disposed of during the year. Of this number, 249 were acted upon favorably to the appellants and 26 unfavorably.

The law requires that requisitions from the Provinces and municipalities upon the bureau of supply, the bureau of printing, and other bureaus be approved by the executive secretary. In complying with this provision of law such requisitions are carefully reviewed to see that statutory and administrative requirements are followed, that unnecessary or too expensive equipment is not furnished, and that other articles or material are not supplied in excessive quantities. To the end that road equipment and machinery, automobiles, launches, etc., may be of uniform and accepted standard, requisitions are transmitted to this office through the bureau in interest for its advice and comment. The same procedure is followed in the case of arms and ammunition, medical supplies, building materials, etc. During the fiscal year ended June 30, 1913, 4,836 requisitions on the bureau of supply and 1,258 on the bureau of printing were received and acted upon.

NEW LEGISLATION.

We have had the usual amount of new legislation affecting provincial and municipal governments, some of it highly important.

Act No. 2197 provides that in all future assessments of property the value of machinery shall be excluded from taxation, and that

assessments now in force, when such assessments include machinery, shall be reduced, upon application, in the amount of the value thereof.

Act No. 2199 appropriates ₱500,000 for the purpose of affording temporary means of support to the inhabitants of the districts affected by the typhoons which swept over the Philippine Islands in November and December, 1912.

Act No. 2204 exempts certain personal property from seizure for delinquency in payment of the land tax.

Act No. 2217 authorizes municipal councils to make appropriations for the maintenance of night schools in their respective municipalities.

Act No. 2220 authorizes the provincial board, subject to the approval of the governor, to fix or change the salaries of lieutenant governors of subprovinces.

Act No. 2224 provides for the holding in the city of Manila of an exposition of Philippine products, at a date to be fixed by the board of directors, to be known as the Philippine Exposition. Provincial and municipal governments are authorized to appropriate moneys in aid of same.

Act No. 2228 authorizes the utilization of road and bridge funds by provincial boards, upon approval of the Governor General, for the purpose of subsidizing or for acquiring, operating, and maintaining means of water transportation within the Provinces or between them and adjacent islands, or to dredge rivers and provide facilities of communication and transportation by river.

Act No. 2229 authorizes certain measures for improving the planting, curing, and preparation of tobacco.

Act No. 2231 authorizes municipal councils under certain conditions to close municipal roads, streets, alleys, parks, or squares for governmental purposes.

Act No. 2232 amends Act No. 2156 by limiting the number of municipalities which may be included in a sanitary division to four.

Act No. 2249 authorizes provincial boards and municipal councils, subject to the approval of the Governor General, to acquire real estate by the right of eminent domain for governmental purposes.

Act No. 2250 authorizes municipal councils to require owners of large cattle, sheep, goats, and swine to keep such animals from moving, running, or being at large, except when in charge of some person of sufficient discretion, and to penalize infractions of the law.

Act No. 2254 appropriates ₱400,000 for the establishment of colonies and plantations for the cultivation of rice and other food cereals and for the better distribution of the population of the islands.

Act No. 2259, known as the "Cadastral Act," provides special proceedings for the settlement and adjudication of land titles.

Act No. 2266 amends Act No. 314, providing a more simple method of procedure in cases of suspended municipal officials and justices of the peace.

By far the most important piece of legislation of the year, from the provincial point of view, was Act No. 2238 changing the method of assessing real estate for taxation and putting the system upon a more logical and effective basis. The working out of the revision of land values thereunder will be the most important duty of the senior special agent this coming year.

LAND TAX ASSESSMENTS.

There have been two general land tax assessments, the first made under the provisions of the municipal code during 1901 and 1902 and becoming effective with the last-mentioned year; and the second made during 1906 under the provisions of the same law, except in so far as superseded by Acts Nos. 1455, 1472, 1496, and 1516. The collection of the land tax for 1906 and 1907 was suspended and was not resumed under the second assessment until 1908. This second general assessment has since remained in force and will continue to do so until gradually superseded by the general reassessments authorized and now being instituted under the provisions of Act No. 2238 passed by the last Legislature.

Act No. 2238 does not provide a new general assessment but for a general revision of assessments when so directed, from time to time, by the provincial boards. It creates the position of provincial assessor, in place of municipal boards of tax assessors, which consisted of the municipal president, the municipal treasurer, and a person appointed by the provincial board. After making the initial general assessments, these boards met in November of each year for the purpose of making revisions on account of changes of ownership or conditions and to add new property to the list. Many of the boards possessed no particular skill for the duties devolving upon them, and their work had often to be performed hastily to effect its completion during the limited period of time allowed them. The results were, in many cases, that property was under-declared in area and value and so assessed, and inaccuracies occurred, making the assessments inequitable as between different property owners and depriving the provincial and municipal governments of much revenue which they would have received under more careful and systematic assessments of the values of the property taxed.

Section 1 of the new assessment law provides that—

The position of provincial assessor is hereby created for each Province possessing municipalities organized under the provisions of the municipal code. In those Provinces organized under the provincial government act the assessor shall be appointed by the executive secretary, upon nomination of the provincial board, and shall have his office in the provincial building. He shall be a resident of the Province to which appointed and shall not be subject to the provisions of the revised civil-service act unless his appointment shall so state. He shall receive such salary as the provincial board shall fix with the approval of the executive secretary.

In Provinces organized under the special provincial government act, possessing municipalities organized under the provisions of the municipal code, the respective provincial treasurers thereof shall be, ex-officio, provincial assessors.

In addition to his powers to revise and correct all assessments upon direction of the provincial board, the provincial assessor is authorized:

(a) In case more than one declaration has been made of the same property, to cancel all declarations except the one properly made.

(b) In the case of property which has changed ownership, to cancel the declaration of the original owner and substitute therefor the new declaration in the name of the new owner.

(c) To eliminate from the list of taxable property all property which, being exempt, has been unduly included in the same.

(d) To assess and value all utilizable improvements made upon the property during the preceding year, but the owner may make use of the right of appeal mentioned in section 6.

(e) To reduce the assessment against any taxpayer whose improvements already assessed have been destroyed during the preceding year.

(f) To declare, or have declared, and to assess the value of all real property which has not theretofore been declared, in accordance with section 5.

(g) To reduce the value of any real property already assessed which shall have suffered a permanent loss of value by reason of storm, flood, or other casualty during the preceding year.

He also has power to subpoena witnesses and to require them to testify under oath concerning the value, amount, and ownership of real property subject to his assessment.

Another and very interesting feature of the new law is the requirement that general schedules of values of land be prepared by the councils of the respective municipalities concerned and approved by the provincial board for the government of the assessor. In this respect the law provides that—

Prior to directing the provincial assessor in accordance with the provisions hereof, to proceed to revise and correct the assessments and valuations of real property, the Provincial board of each Province possessing municipalities organized under the provisions of the municipal code shall require each municipal council to prepare in such form and detail as the executive secretary may prescribe a general schedule of the values of the different classes of land for its municipality, which shall be forwarded to the provincial board for approval, and such schedule, when approved by the provincial board, shall serve the assessor as basis for the valuation and assessment. Should the provincial board disapprove said schedule because it does not find it impartial, just, and equitable with respect to the other municipalities of the Province, it shall return the same to the municipal council with its amendments, and if such amendments are not accepted by the municipal council, the latter shall forward them, with its arguments, in appeal to the executive secretary, within 30 days after receipt thereof; if said term shall lapse without an appeal having been made, the schedule as amended by the provincial board shall govern. The decision of the executive secretary shall be final. (Sec. 9 of Act No. 2238.)

For guidance in the preparation of schedules of values, municipal councils and provincial boards have been advised by this office as follows:

In fixing the values of land in the schedules it should be borne in mind that the factors which should govern are those which would influence a purchaser under ordinary conditions, assuming that the seller is not compelled to sell nor that the needs of the buyer make it imperative that he obtain a certain location. Freed from any special conditions, the matters which would influence a purchaser's mind, in the case of agricultural land, would be the fertility of the soil and the ease with which the land could be reached and the products of it sold. In the case of urban land, its desirability for the purposes of business or residence would depend upon many varying considerations.

It is not the purpose of these instructions to formulate rules for the determination of values of land, but simply to indicate as clearly as may be, the considerations which ordinarily govern buyers and sellers in their operations, and to show how these may be tabulated for the purposes of an assessment schedule.

In illustration of the method of preparing schedules of values of agricultural land, the following is quoted from instructions issued upon the subject:

Let it be said that in the municipality of San Juan, the council defines first-class irrigated rice land as land which is capable of producing annually for each hectare more than 60 *cavanes* of *palay*. The value of land of this productive capacity, if situated in the valley of the river Agus within 3 kilometers of the *población* of San Juan or of the *barrios* of Buenavista and Santa Cruz, is fixed at ₱400 per hectare. Such land is rated "a" in regard to accessibility. Land of the same productive capacity, but situated in the above-named *barrios* from 3 to 6 kilometers from the centers thereof is rated "b" in regard to accessibility, and its value is fixed at ₱300 per hectare. All other irrigated rice land not included within the above descriptions is rated class "c" as to accessibility and its value is fixed at ₱250 per hectare. Land which produces annually for each hectare from 40 to 60 *cavanes* of *palay* is declared to be second class as to productivity. Such land if rated "a" as to accessibility is valued at ₱350 per hectare; if rated "b" at ₱200 per hectare; if rated "c," at ₱150 per hectare. Land which produces annually

for each hectare less than 40 *cavanes* is declared third class and is valued as follows: Accessibility "a," ₱150 per hectare; accessibility "b," ₱100 per hectare; accessibility "c," ₱80 per hectare.

We have now a schedule of values which may be shown in tabulated form, thus:

Rice land (irrigated)—Value per hectare.

Productivity.	Accessibility.			
	a.	b.	c.	d.
1.....	₱400.00	₱300.00	₱250.00	.....
2.....	350.00	200.00	150.00	.....
3.....	150.00	100.00	80.00	.....
4.....	.....	.....	.....	.....

In the preparation of schedules of values for urban land, similar considerations govern, with the exception that the factor of desirability of the land for residential or commercial purposes determines its class, rather than the fertility of the soil.

In the matter of appeals, the new law provides that—

Each owner whose property is assessed or valued in an amount in excess of that declared by him shall be immediately notified in writing of such increase by the provincial assessor, and should he feel aggrieved by the action of the said assessor, he shall have the right of appeal to the municipal council, which shall within 30 days from the receipt thereof take action on same, and if the assessor does not agree with said action, shall forward all papers to the provincial board, whose decision shall be final, except as provided in section 10 hereof.

Written notice shall also be given to the owner or owners, if known, of the valuation placed on property newly declared, and such owner or owners also shall have the right of appeal to the municipal council, in the same manner and subject to the same conditions as provided in the first paragraph of this section. The decision of the provincial board shall likewise be final, except as provided in section 10 hereof. (Sec. 6 of Act No. 2238.)

Section 10 of the law, referred to in the foregoing quotation, gives the further right of appeal by either side to the executive secretary.

The assessors, under the new law, are now being appointed and instructed in their duties, and the municipal councils and provincial boards are preparing the general schedules of values by which they will be governed in their work of assessment.

It is believed that the new law will be productive of results beneficial alike to the property owner and to the Government—to the former in affording him an intelligent and equitable assessment of his property, or a simple and easy method of appeal in case he believes it to be otherwise; and to the latter in bringing to it increased revenues for the prosecution of its activities. As is known, the portion of the real property tax, the collection of which is mandatory, is required by law to be expended for the construction, administration, and maintenance of primary schools and the construction and maintenance of roads and bridges.

JUNIOR SPECIAL AGENTS.

Loan operations to provinces and municipalities are under the immediate charge of one of the junior special agents.

During the year the policy of making loans to provincial and municipal governments for public works and permanent improvements has been continued, and the total amount of loans made from insular funds to these governments was increased from ₱3,795,079.94

to ₱7,270,663.91. On June 30 there were available for additional loans only ₱416,316.

In March of the present year it became evident that all money made available for loans by Acts Nos. 2083 and 2088, creating the gold-standard fund, which is the only trust fund of the insular government from which money may be loaned for periods of more than five years, would soon be exhausted. It became necessary to secure funds from other sources, and, authorized by the Governor General, arrangements were made with the municipal board of the city of Manila whereby its sewer and waterworks bond sinking fund could be invested in the class of loans referred to.

This arrangement is deemed to be particularly advantageous, inasmuch as, under the provisions of Act No. 1323, creating the sewer and waterworks bonds sinking fund of the city of Manila, loans from that fund may be made for any period desired by the municipal board, and approved by the Governor General and the secretary of finance and justice.

The city had found it difficult to invest all its sinking funds in approved securities, and, owing to the large deposits of funds by provincial governments, the banks in the city of Manila were unwilling to accept interest-bearing deposits of city funds. Under this arrangement the loans to provincial and municipal governments for 10 years are made one-half from insular government funds, payable the first 5 years of the loan, and one-half from the city of Manila funds payable the last 5 years of the loan.

The insular government has guaranteed the city of Manila against loss by reason of such investments. This guaranty will be made effective by taking over into the trust funds of the insular government at the end of three years all loans, as they then stand, made to provincial and municipal governments by the city of Manila.

The Government had no hesitancy in making this agreement, for the reason that no loans are granted, either from the insular government funds or from the city of Manila funds, until a thorough investigation by this office proves beyond doubt the ability of the borrowing provincial or municipal government to repay. Under this arrangement there had been loaned to municipalities, at the close of the fiscal year, ₱188,280. No loans from the city of Manila funds were made to provinces.

LOANS FROM INSULAR FUNDS.

Of the loans made during the past fiscal year, ₱2,007,816.03 have been granted from purely insular funds to provincial governments for the following purposes and amounts:

Provincial high schools.....	₱100,000.00
For other provincial buildings.....	111,000.00
Roads and bridges (including city of Manila).....	1,776,000.00
For other purposes.....	20,816.03

Loans to municipal governments amounting to ₱1,467,767.94 have been granted as follows:

School buildings.....	₱53,400.00
For other municipal buildings.....	24,000.00
Markets.....	1,205,000.00
Sewer and waterworks system.....	162,000.00
Wharves.....	10,000.00
For other purposes.....	13,367.94

These loans are made after a thorough investigation by this office, and the work of placing the loans to the credit of the projects requires, in each instance, the preparation of loan resolution forms, including conditions to be accepted by the borrower to insure the repayment of the loan, and special conditions required by the nature of each project, such as a description of the site to be purchased, requirements as to appropriations by the province or municipality concerned, and the requirement to set aside certain municipal property, or to purchase property for other public purposes. Personal supervision is given to each individual project in order to insure prompt action by municipal councils in loans to municipalities, and by provincial boards in cases where loans are made to provinces.

Upon receipt of the acceptance letters are addressed to the insular treasurer by the Governor General directing that the loans be granted. Copies are furnished every office concerned, including the insular auditor, director of public works, secretary of commerce and police, the provincial board and municipal council.

It is often found that immediately to place to the credit of a project the entire amount of the funds required would impose a burden, in the matter of interest payment, which the province or municipality could ill afford to bear and large loans are usually placed to the credit of the disbursing officers in installments as required.

This method is considered just to provincial and municipal governments and not unfair to the insular government, but it has placed upon this office a very considerable amount of work which might not otherwise be necessary.

In order that installments of loans contemplated may be placed to the credit of a given project as required by contracts entered into, and in order that no such reserve shall be maintained in the trust funds of the insular government as will by reason of noninvestment cause an appreciable loss of income, the most careful supervision is necessary to give to the insular funds such movement as will prevent embarrassment to the several government entities interested.

In this work, as in all other, the executive bureau has had the hearty cooperation of the insular auditor, whose system of accounting is such that on a few minutes' notice he can furnish such statements of funds as may be required, obviating duplication of the work in this office. The auditor, however, by reason of statutory restrictions, has record only of loans actually made; that is, money actually gone to the credit of various projects. He can not know, and would, as a matter of fact, have no need of knowledge of various proposed projects and projects approved by the Governor General but not actually ready to be financed. This part of the work devolves upon the executive bureau. For the above reason it will be seen that the statements of loans made by the insular auditor and those of loans by this office will not agree, the statements of this office showing loans to a greater amount than will be found in the report of the insular auditor of the same date.

The record of the provincial and municipal governments remains excellent. There has been no default of payment of either principal or interest during the present year, notwithstanding the fact that severe typhoons during the latter part of the year 1911 greatly reduced collections in several provinces during the last part of the fiscal year 1912 and the first part of the fiscal year 1913.

The caution exercised in granting loans makes such investments safer than investments in municipal bonds ordinarily are and, owing to the control of provincial and municipal finances vested in the central government, safer than industrial, railroad, and many bonds issued by States of the United States.

INVESTMENT OF INSULAR TRUST FUNDS.

Much careful attention by this office is devoted, in conjunction with the insular treasurer, to the general investment of insular trust funds. Such investment comprises loans to provinces, municipalities, and to railroad companies, bonds of railroad companies, of the insular government, and of municipalities authorized to issue bonds. For the purpose of carrying on the development work by means of loans granted, it is frequently found necessary to transfer investments from one fund to another. In order that this may be done without loss of interest to either fund and so as to cause the least embarrassment, strict supervision of the regular and special funds of the government is required.

The fact that bonds of the insular government amounting to ₱24,000,000, of the city of Manila amounting to ₱8,000,000, and of the city of Cebu, the capital of the province of Cebu, amounting to ₱250,000 when advertised have all been bid for at a price above par is evidence of the esteem in which bonds of the central and local governments of the Philippine Islands are held in the financial markets of the world. Notwithstanding the depression noted in other securities of presumably equal value, recent inquiries in the United States show that holders of insular-government bonds have been unwilling to part with them for less than a premium of 3 per cent, although the last issue of the insular-government bonds may be redeemed in 1916.

Of the ₱4,500,000 agreed to be loaned to the Manila Railroad Co. under the provisions of Acts Nos. 2083 and 2088, there had been placed to the credit of the Manila Railroad Co. on June 30, 1913, ₱2,500,000.

During the year 152 municipalities in 20 Provinces were visited by a special agent of this bureau, and inspections of all municipal properties, including buildings, were made. As a result of these investigations, 59 reports were rendered and 62 loans granted. Some reports contain recommendations for loans for more than one project.

There is attached herewith, as Appendix B, a sample copy of a report rendered to the Governor General containing recommendations for the development of one of the municipalities in the Philippine Islands. This report, chosen at random, shows the points as to which investigations are made with a view to the present and future development of municipalities inspected.

In some instances it has been decided that no loans should be made for the projects investigated. The reports, where loans are recommended, are rendered in their order of importance. Additional projects are being investigated, many of which from their importance will take precedence over others previously examined.

In addition to these reports, recommendations for 19 provincial loans were made to the Governor General and approved by him.

Considering the great amount of detail work performed by this office, not connected directly with the investment funds, it is believed

that this section of the work of the executive bureau is being conducted at a very low cost. The entire expense of the salaries of those engaged upon this work, traveling expenses and per diems, for the fiscal year was but 0.00833 per cent of the total loans made to provincial and municipal governments during that period.

MARKETS.

Ten modern markets were completed and opened during the year. Toward their construction the insular government loaned ₱187,500, and the municipal governments appropriated ₱48,287, a total of ₱235,787. There are 30 such markets now under construction for which loans amounting to ₱724,500 have been made. Twenty-six more projects have been approved by the Governor General, and are in various stages of progress, for which loans totaling ₱293,000 have already been granted and ₱391,000 more will be loaned.

Experience has proved that it normally takes at least two years to develop the collections of a new market. In this connection the statements in my last report as to the probable receipts from the modern markets already in operation, based on collections for the months since the markets had been opened, are interesting.

In no case did a market fail to exceed our estimate. San Pablo showed the greatest excess and Pagsanjan the lowest. The figures for all are shown in Appendix C.

Judging from the results shown in Appendix C for the past year, the estimated receipts from new markets as set forth in Appendix D must be conceded to be conservative. This table shows that the market in Lipa, Batangas, makes the best return, and that in Caloocan, Rizal, pays the least on the money invested.

On the amount invested in market buildings in Lipa, the municipality is receiving 26 per cent. The increased earnings of the market amount to 19 per cent.

Caloocan, on the investment, is earning 10.8 per cent; the increased receipts showing an earning of 6.3 per cent.

On the total investment of ₱190,000 in new markets, enumerated in Appendix D, the seven municipalities are receiving from market rents 24.4 per cent. The increased receipts constitute 12.3 per cent on the investment.

Four of the municipalities are paying 3 per cent on the loans made to them for market purposes, and three are paying 3.27 per cent.

That properly housed and conducted markets are a necessary adjunct to the opening of good roads is undisputed. The opening up of new districts will not bring about the best results if a convenient place is not provided to dispose of their products. This is especially true in provincial towns in the Philippine Islands where the greater part of the business is conducted direct between producer and consumer. Where the middleman does not exist he does not suffer, and there can be no question as to the gain to the community if business can be conveniently and cheaply done without him.

On January 1, 1913, which was also the beginning of the provincial and municipal fiscal years, all municipalities were obliged to conduct their markets by administration, instead of farming the privilege, as had been the usual practice.

SUPERVISION OF COLLECTIONS.

The supervision of municipal collections of various kinds is one requiring an amount of carefulness and detail difficult to set forth briefly. Complete monthly reports of all municipal operations, appropriations, expenditures, and collections of rents and privileges are now being received in this office. These reports have to be made on simple forms prescribed by us, so that the officials rendering them may not be unnecessarily burdened.

An instance of the work done is the supervision of market rents. Through the work of a clerk at ₱840 per annum, close supervision has made it possible during the last six months to contribute greatly to increase the market collections by ₱70,000 without expense to the municipalities concerned. A continuance of the same sort of supervision over the collections for fisheries and other municipal revenue-producing property is expected to increase municipal receipts within three years by ₱700,000, ₱500,000 of which, it is estimated, will be received from market rents.

PUBLIC-IMPROVEMENT PLANS.

During the year a file of street maps of the central barrios of all municipalities in regularly organized provinces has been established.

Plans are also being prepared for the widening of streets to accommodate present and anticipated traffic, and for providing for sidewalks and parked areas between roadway and the building lines, as established by surveys.

Owing to the limited amount of funds available for this purpose in most municipalities, this work must necessarily progress slowly. However, with plans already prepared, having the approval of municipal councils and of provincial boards, this office upon advice of a destructive fire, or severe damage by typhoon or other causes, can at once notify the provincial and municipal officers to begin securing the necessary additional land for such street purposes in the district affected before new structures add to the expense.

During the year, work was begun to ascertain whether or not all parcels of municipal land are registered in accordance with law. Where registration has not been secured, proceedings are ordered instituted immediately.

More than 4,000 maps of municipal properties have been purchased and indexed by this bureau. They are in constant use for laying out proposed new streets, parks, plazas, and cemeteries and in discussing with visiting municipal and provincial officials development plans within their respective jurisdiction.

The consulting architect has prepared standard plans of different types of market buildings. These have been prepared along suggestions furnished by this office, based upon our experience and careful study of the operation of markets already installed.

Although a site which contains less than 1 hectare is not accepted for a market, the financial condition of practically all municipalities precludes the possibility of erecting a sufficient number of buildings to cover the site. Often it will be several years before the municipality will actually require the entire hectare for market purposes. This office, however, when preparing reports to the Governor General,

recommends the entire layout of central buildings and tiendas (small shops or bazaar stalls), and after approval of the report by the Governor General, the consulting architect is requested to prepare plans for all buildings for immediate and future erection. Two plans of buildings are always requested, and sometimes three and more, and the municipal council is given the choice of such type as it believes most desirable, this office, however, recommending the approval of the one which experience has shown probably to be most advantageous to the municipality. It is obvious that each market site, owing to the difference in boundaries, location of the main highways, and difference of topography, requires most careful and painstaking consideration not only in selection but also in the location of the buildings.

Standard plans have also been prepared for reinforced concrete, fireproof presidencias (town halls), ranging in cost from ₱10,000 to ₱34,000. Before loans are granted for such projects the sites must be approved by this bureau. No site of less than one-half hectare in area is permitted.

Provision for municipal cemeteries is also projected in many municipalities by means of loans. Sites for cemeteries must be high and easily drained, be well outside of town, on a road passable at all times of the year, and be approved by the bureau of health before final purchase.

The correspondence incident to the preparation of ground and building plans for proposed improvements, in securing their approval by provincial boards or municipal councils, the acquisition of the site as selected by this bureau, advertising the project at the proper time, making recommendations to the local officials as to the bid considered most advantageous, correspondence with the local officials in regard to the fulfillment of all conditions imposed by the provisions of the loan resolutions, and other work of like nature is dispatched or supervised by the bureau.

In this work of municipal development we have had the hearty cooperation of all bureaus interested, particularly of the bureaus of education, public works, and lands.

All appropriations and ordinances of the municipal board of the city of Manila come under the supervision of this office, which makes recommendations in regard thereto for the approval or otherwise of the Governor General, whose approval is required by statute.

OFFICE OF THE CHIEF CLERK.

Attached directly to this office are 21 stenographers, 23 clerks, and 24 messengers, of whom 13 stenographers, all Americans, 3 clerks, and 9 messengers are detailed to service in the offices of the Governor General and heads of departments.

At the close of the year the bureau contained 208 people, of whom 45 were Americans and 3 Spaniards. The annual pay roll was ₱344,292. The percentage of Filipinos was 77. No important changes have been made in the staff.

Official cablegrams between this government and the United States are dispatched in code between this bureau and the Bureau of Insular Affairs. Excerpts from them are furnished officers and offices concerned. We also handle cables between this government and places

in the Far East. During the year there were 356 cablegrams received, 395 sent, and 5,845 excerpts distributed. The expense of the service was ₱17,183.32.

The bureau continues to supervise the telephone service furnished the government offices by the local company, and while we have not succeeded in improving the service as much as was hoped, it is not because of lack of effort. There are 525 telephones in use under our supervision, 17 private branch and exchange switchboards for which we employ 20 operators. The amount of use made of the telephone can be estimated from a record taken of one of the busier switchboards, serving 39 telephones, which showed 50 interior calls a day, 161 outgoing calls, and 145 incoming calls. We attend to an average of 100 complaints and calls for repairs a month.

The property (equipment) owned by the bureau on June 30 was valued at ₱191,532.48, which is ₱13,500 more than the year before. The increase is represented by new steel filing furniture, an automobile for the Governor General's aid, a moving-picture outfit used by the office of the secretary of the interior, a motor cycle for carrying mail, and dictaphones. We had on hand ₱56,491.18 worth of books and documents for sale or free distribution and expendable supplies, mostly stationery, valued at ₱4,364.59. There was ₱12,966.44 spent for postage, mail and telegrams, during the year.

The number of public documents above mentioned on hand was 1,136,810. During the year we distributed 828,807 of such documents and transferred 1,998 to the Philippine Library and 1,718 to the Philippine Assembly. Our bill for printing such matter, exclusive of those reserved for "sales stock," was ₱44,750.02.

PROPERTY CLERK.

The property clerk, who is under the immediate supervision of the chief clerk, is responsible not only for the property in the executive bureau, but also for the official equipment of Malacañan Palace, which includes furniture, dishes, glassware, linen, etc. The value of this on June 30 was ₱40,321.56, which is included in the executive bureau property above mentioned. The grounds around Malacañan Palace are cared for by the city of Manila. Decorations of the building and grounds for receptions and official functions are arranged by our janitor force.

The files of the local newspapers, so far as we have been able to make them reasonably complete, have been bound from time to time in canvas, and we now have a library of 363 of these volumes. They are already very valuable and will become priceless.

The chief clerk disburses the following appropriations: Executive, Philippine Commission, executive bureau, private secretaries to Resident Commissioners, board of rate regulation, fund for the suppression of head hunting and promotion of friendly relations with non-Christian tribes, and special appropriations for expenditure under instructions of the Governor General, such as relief of typhoon sufferers, Act No. 2199; insular aid to provinces, Acts Nos. 1963, 1989, 2186, 2194, 2208, 2262, 2264, and 2274; and rice colonization and plantation fund, Act No. 2254. During the year there were prepared under his direction and signed by him 3,466 warrants and journal vouchers, aggregating ₱1,883,362.61.

TRANSPORTATION.

The old contract with the Pacific Mail for a rate of ₱300, first class, between Manila and San Francisco for government employees, has been continued. Several other lines are now meeting this rate upon proof of such employment. The Spanish Mail rate of ₱350 to New York via Suez was raised to ₱450, and the result has been a falling off in the travel. The chief clerk's office issues all requests for transportation under the above contract and prepares all correspondence in connection therewith. During the year such transportation was secured to San Francisco for 184 adults, 21 children, and 3 servants, and to Seattle for 18 adults and 7 children. He also arranged for commercial transportation for 118 adults, 13 children, and 1 servant to New York, and for 2 adults to points within the United States. The trans-Pacific Army transports also generously carry civil government employees when possible and proper. This business is also handled by the chief clerk, who last year arranged transportation for 238 adults, 49 children, and 9 servants to San Francisco; for 30 adults and 4 children to Nagasaki; for 10 adults and 5 children to Honolulu; for 5 adults and 2 children from Nagasaki to San Francisco; for 1 adult from Honolulu to San Francisco; and for 52 adults, 4 children, and 1 nurse to China.

In furtherance of the policy to rid the islands of American vagrants, bad characters, and indigents, transportation to San Francisco was also obtained for 75 indigents and 50 conditionally pardoned convicts.

In addition, transportation was arranged between places in the Philippine Islands, on the Army interisland transports, for 336 adults, 17 children, and 15 servants.

When it is considered that transportation was thus managed for a total of 1,270 persons, or nearly 4 for every day in the year, and that each case involves the sending of not less than two communications, on an average, the volume of this work becomes apparent.

Under the statute, Act No. 1780, the Governor General grants all permits to import or possess firearms and ammunition, but as the bureau of constabulary is better organized to pass on the propriety of such permits, the authority has been delegated from this bureau to it, and only such cases as are disapproved by the constabulary are forwarded for consideration. Fourteen of these cases were received during the year. This bureau also secured the issuance of special permits to 99 provincial and municipal employees to carry government arms under section 17 of the act, revoked 28 licenses for improper use or care of weapons, arranged relief from bonded liability to principals and sureties in 5 cases where by the capsizing of boats the arms were lost beyond possibility of recovery, and issued 10 permits to merchants to deal in arms and ammunition.

The recorded overtime work of the bureau, which falls far short of the full amount, was 44,884 hours, or 6,412 days, or the equivalent of the entire force for 1 month and 8½ days. The last reported figures on this subject were for 1912, 38,649 hours and 1908, 33,769 hours.

Some of the other duties of the chief clerk, and matters affecting the work of his office, are as follows:

Almost every incoming mail brings inquiries regarding persons supposed to be in the islands. During the year 138 such inquiries

were received, 110 being from the United States and 5 from persons living in the islands, the remainder from foreign countries. A total of 76 "missing" persons were located through our efforts.

Two thousand six hundred and eighty-six requisitions for printing and binding for bureaus and offices directly under the jurisdiction of the Governor General were approved, as were also a large number of requisitions for supplies. As the latter were not recorded it is not possible to state how many received action.

REQUESTS FOR RELIEF.

Action was prepared on requests of insular officials and employees for relief, under the provisions of Act No. 1792, from liability for loss or destruction of government property. One hundred and twenty-five such cases were disposed of.

On the requests of interested officials and employees, arrangements were made for the payment in the United States of 19 allotments from their salaries.

In connection with the disciplinary supervision of the bureau personnel, including the janitor force, 130 appointments and 86 promotions were prepared. All reports regarding personnel required by the civil service are prepared in this office.

Three thousand nine hundred and eighty-five compromises for violations of Act No. 1519 (weights and measures law) were checked prior to approval.

There was the usual preparation of correspondence with consuls, and with foreign Governments.

In this office are prepared letters and indorsements to the Army requesting the discharge of enlisted men to accept employment with bureaus of the insular government, as well as requests for the sale of Army supplies and equipment to government bureaus and offices.

Under regulations in force, all officials and employees who visit the United States on leave of absence must request return transportation before leaving the islands. These requests are forwarded to the Bureau of Insular Affairs, and are taken care of by the chief clerk.

The bulk of the routine correspondence of the bureau regarding the estates of persons who die in the islands is taken care of in this office.

The annual reports of provincial governors are assembled and copied in this office.

Other matters requiring his attention are: Acknowledgment of letters received, the purchase of bureau equipment and supplies, and the details connected with the custodianship of the Ayuntamiento Building, in which the executive bureau is located.

MISCELLANEOUS DIVISION.

This division attends to the legal matters directly made the duty of the bureau or incidental to its other activities, and also exercises the supervisory control of the executive over the political administration of the provinces and municipalities. It now comprises 1 chief of division (Filipino), 1 American lawyer, 3 Filipino lawyers, 3 stenographers, 13 clerks, and 1 messenger, all Filipinos.

All appointments to office made by the Governor General are prepared in this division. In most cases this entails a careful investigation as to the character, legal eligibility, antecedents, and availability of the person proposed. In the case of so minor an office as justice of the peace at least 3 letters or indorsements are necessary. About 10 per cent of those first proposed by the judges of court of first instance are eliminated by this process. The more important appointments are guarded with proportional care.

In this way 394 appointments were made during the year by the Governor General by and with the advice and consent of the Philippine Commission, and 131 by the Governor General alone. Appendix E gives the details.

The provincial and municipal codes place removals from local offices within the jurisdiction of the Governor General. The procedure as to municipal officers includes investigation of charges by the provincial board, and in the case of provincial officers by a special investigator under Act No. 1697, often a lawyer from the division, a report of the investigation with the evidence taken, the detailed examination of the whole case by a lawyer of the division and a report by him checked by the chief of division, giving a résumé of the facts proved and a recommendation as to whether the recommendation of the investigator should be followed, modified, or reversed. The total number of cases against municipal officials was 129, and against justices of the peace 23, an unusually small number, which shows that the new justice of the peace act is producing good results. Against provincial officials there were 5 cases and 2 against officials of the city of Manila. Special investigators from the division handled 5 of these cases. There were altogether 42 removals, 10 resignations, and 18 suspensions from office, as a result of this work. Appendix F gives fuller information.

PETITIONS FOR PARDON.

By an administrative rule a convict in Bilibid, to which all prisoners sentenced for more than one year are sent, may petition for pardon on his entrance and after that ordinarily, not oftener than once a year. A thorough investigation of each case is made, covering the recommendation of the trial judge, prosecutor, provincial governor, and constabulary in his Province, and persons injured by the crime, and often including an examination of the testimony in the case and of new evidence brought forward. There were 151 cases under examination at the beginning of the year, and 1,095 new applications were received, of which 526 were investigated as being within the rule. Full pardons were granted to 29 persons, conditional pardons to 266, and commutations of sentence to 42. Appendix G gives the figures in full. Besides the pardon work of the division proper the committee on pardons, created by the Governor General in 1906 especially to attend to bandolerismo cases, considered 133 cases and had 64 pending before it at the close of the year.

Under the Revised Statutes of the United States as amended, the Secretary of State has authorized the Governor General to issue passports under rules prescribed by the President. During the year 149 passports were issued to citizens of the United States and 69 to Philippine citizens, a total of 218, which is 21 less than in the year before.

BOUNDARY DISPUTES.

Section 1 of the Municipal Code gives the interested provincial boards original jurisdiction to settle boundary disputes between municipalities in different provinces. In practice this procedure is seldom followed because the decision of the board is never final. All such cases as well as those of disputed provincial boundaries are, therefore, investigated by this division for decision by the Governor General in the first place under Act No. 1748 which gives him power to fix and change boundaries. The policy is to make political boundaries agree with natural commercial divisions where possible and this requires study. Five cases were prepared last year and are ready for decision.

The power of the Governor General to reserve land for public purposes is exercised by executive order. The necessity for the reservation, extent needed, and other details are investigated by this division which then obtains a description from the bureau of lands and incorporates it in an executive order. Sixteen reservations were so made, 2 former orders were modified and 5 reservations released by revocation of the original order.

In addition to the inspection of provincial and municipal resolutions and ordinances by the provincial division, the same law provides for appeal to the Governor General where the municipality objects to an annulment by the provincial board. During the year there were about 30 of such appeals decided in the division. In addition to these the division has of its own initiation directed the revocation of 41 municipal ordinances and resolutions which were found to be *ultra vires*.

EXECUTIVE ORDERS.

The executive orders of the Governor General are prepared in the miscellaneous division. There were 116 orders and 7 proclamations issued.

Early in the year the Governor General issued an executive order (No. 44) requiring provincial and municipal records and correspondence to be kept in English, but with the permission to apply for the retention of Spanish where English was not sufficiently understood to make it feasible. Eighteen provincial boards, 459 councils, 33 municipal treasurers and 9 other officials have been granted this permission.

Under Act No. 82 (the Municipal Code) it is the duty of every municipality organized thereunder to establish public cemeteries for the burial of the dead. Of the 740 municipalities in the Philippine Islands 309 have now established municipal cemeteries and the division has charge of the work of causing the other 431 municipalities which do not yet have municipal cemeteries to expedite the establishment of at least one in each municipality.

Under Act No. 2169, reorganizing the municipal police, the members of such police appointed thereunder are removable for cause by the municipal president and only upon a public hearing held by the municipal council or a committee of three thereof. Either party to the proceedings, if dissatisfied with the president's decision, is given the right to appeal therefrom to the provincial governor, from

whose decision further and final appeal lies to the Governor General. During the year the division has handled 10 such appeals.

Sixteen circulars were issued, 25 bills drafted, 6 commission resolutions engrossed by the miscellaneous division.

The extradition from Hongkong mentioned in my last report of the Filipino convicted of abduction is still pending. The case has been most tenaciously opposed upon purely technical objections, which are being overcome as they arise, but with much delay and great effort. As the principle involved is of the highest importance, it has been deemed necessary to send and retain the assistant executive secretary in Hongkong, where he has spent four months of the year. It seems assured that eventually the treaty obligations of Great Britain will be fulfilled.

Two fugitives from justice have been located in Hongkong during the year, but both waived extradition and returned to face trial for embezzlement. There were no formal applications from outside for extradition.

REGISTRATION OF TITLE.

Before a province or municipality can expend money in buildings the title to the land must be registered under the Torrens Act or approved by the Governor General. Frequently this approval is more or less formal, the certificate of the local law officer being taken, but often an examination of the title is needed. There have been 137 of these approvals, of which 65 were for the city of Manila.

The Governor General executed 15 leases and 14 deeds of government land other than "public land." Most of these instruments were drawn in the division and all were there examined.

One hundred and nineteen homesteads and mining patents were examined and submitted to the Governor General for execution.

Insular contracts for public works, as distinguished from contracts for work, etc., require the approval of the Governor General. Thirty-three of them were carefully examined and submitted for his execution. They are finally recorded in the division of archives.

Contracts for work and labor for the city of Manila are treated as above. There were 25 of these.

By Act No. 2249 the approval of the Governor General is required before condemnation proceedings can be begun. The act became effective February 11, and 12 cases were approved by June 30.

ELECTIONS.

General elections for all offices were held June 4, 1912, but at the date of my last report the statistics were not completed. As it is, and after much effort, the figures from 8 provinces are incomplete in that the qualifications of electors in 41 municipalities can not be given, the reason being that the election inspectors failed to comply with their duties. The number of persons who voted was 235,792, and we have information as to the qualifications of 231,073. Of these last, 97,074, or 42 per cent of the voters, possessed the educational qualifications, i. e., knowledge of English or Spanish. The election covered 81 Assembly, 62 provincial, and 6,478 municipal offices. Election crimes were, unfortunately, numerous, 794 persons having been

indicted therefor and 343 already convicted. Seventy-five per cent of those convicted swore falsely that their taxes were paid knowing they were unpaid. Appendix H gives the figures in detail.

The election of provincial officers must be confirmed by the Governor General before the officer elect can take his seat. This necessarily entails an informal investigation in most cases. The Supreme Court has decided that the question of eligibility is one for the Governor General to decide incidental to confirmation. After the last election two officers were protested for ineligibility, one, a provincial governor elect, was investigated by a member of this division, the other elected a member of the Manila Municipal Board, was investigated by the bureau of justice.

GREAT SEAL.

This division also has charge of the great seal of the government, of preparing certificates of the official character of notaries public, whose appointments, signatures, and seal impressions are all kept in the bureau, and of making copies of the records of a legal character requested by the public. The great seal is affixed to a variety of documents much greater than is usual with great seals for the reason that the executive departments generally have no seals. In the year there were issued 143 certificates of official character under this seal and 153 pages of copies.

An index under abundant heads is kept of all opinions of the attorney general and of those of the executive secretary sent out of the office. This is necessary and most valuable for the saving of work and for preventing conflict of opinions.

The division also assists the director of coast surveys in securing from local authorities needful geographical data and assists the board on geographical names by disseminating its decisions.

Two Filipino scribes are kept busy filling in and affixing the great seal to officers' commissions, of which there were 274 prepared during the year. When required resolutions of the Commission are engrossed for it on parchment. The work they turn out is remarkable.

A complete and accurate card index of all provincial and municipal officials is kept up to date as well as a record of their suspensions, removals, disqualifications or convictions for reference in case they come up for office again, as they often do.

In its capacity of legal adviser for the bureau the division is constantly called on by the Governor General, the chiefs of departments, provincial and municipal officers, and by the rest of the bureau for oral or informal opinions as to the legality of action proposed or taken. This work is highly important, as it directly affects the whole trend of government policy and frequently involves research and discussion of highly confidential matters on the border between law and statesmanship. It is safe to say that not a day passes without answering a half dozen questions of varying importance.

Appendix I shows the percentage of the total of American and Filipino provincial and municipal officers appearing in the last report and completed to June 30, 1913.

Appendix J shows the number and nationalities of provincial officials in office on June 30, 1913, the number of provinces and the percentage of total of American and Filipino provincial officers.

Appendix K shows the number of municipalities, townships, and settlements on June 30, 1913, and of municipal and township officers and the percentage of the total of American and Filipino municipal and township officials.

Appendix L shows the nature and result of the 306 charges brought against the 152 officers referred to in Appendix F. The totals of the two appendixes do not coincide, for the reason that an officer is frequently charged in the same case with several different offenses, found guilty of some and acquitted of others.

DIVISION OF LEGISLATIVE RECORDS.

This division is under a chief, who is also secretary of the Commission. It has a force of two Americans and four Filipinos. As a branch of the executive bureau it is the repository of all enacted laws of which the bureau is made the custodian, and as servant of the Commission it is the record office of that body in its dual capacity of the upper house of the general legislature and as the sole legislature for the non-Christian tribes.

There have been filed with the bureau 69 acts of the Legislature, 23 acts of the Commission, and 7 joint and concurrent resolutions of the year's work. The report of the division is necessarily more legislative than executive in nature and has, therefore, been sent to that branch for treatment.

The division also has assumed the work incident to the publishing of advertisements, under the government contracts at ₱500 a month each, with the Manila Times and Cable-News, published in English, and with the Ideal and Democracia, published in Spanish. During the fiscal year there were transmitted to these newspapers for publication a total of 678 official advertisements, including acts, resolutions, proclamations, executive orders, ordinances, and notices of different kinds. A record and careful check is kept on their publication.

DIVISION OF ARCHIVES, PATENTS, COPYRIGHTS, AND TRADE-MARKS.

This division, under the immediate supervision of the second assistant executive secretary, consists of 17 clerks and 3 messengers; all Filipinos. It was originally created by Act No. 273, its duties increased by Act No. 644, and was finally merged with this bureau by Act No. 1407.

The work is more important than showy. Tons of old Spanish records, mixed together without system, some of which are invaluable and many worthless, have been and still are being sorted and arranged for preservation or destruction. Indexes are being made of the retained archives as fast as possible, but this must be subordinate to the current work.

Under Spanish law, the notary public is a much more responsible and important functionary than is usual in the United States. In the European system he is the conveyancer, draftsman of contracts, and family lawyer in nonlitigated matters. He keeps a record of his acts, which is often the sole authentic evidence of the transaction so that he corresponds in a way to our county clerks and prothonotaries. Under our new Philippine jurisprudence he is no longer so

important, but, nevertheless, in the country towns especially, retains some of his old character. Consequently the law requires that his records be deposited in this division for preservation on behalf of those concerned. Excerpts from these records were furnished during the year to 468 private persons; they amounted to 7,034 folios and produced ₱1,550.20 in fees. Similar records, amounting to 881 folios, were furnished various government offices. Two hundred and 32 notarial registers from the notaries in different towns were received and filed.

The law requiring the registration and branding of horses and cattle requires that a facsimile of each brand be filed in this division. Nineteen thousand seven hundred and six were received during the year and the total number now on file is about 300,000.

As its name implies, the division is the registry office for patents, copyrights, and trade-marks. Of these there were 190 trade-marks and 106 American patents filed, 32 assignments recorded, and 32 copies of documents issued. The fees from these sources were ₱10,442.33.

The registration of corporations was greater than ever. Domestic corporations to the number of 123 filed articles and 12 foreign companies received licenses to do business in the islands. The fees from corporations amounted to ₱9,305.

Whenever public improvements are contemplated the title to the land immediately comes in question, and in many cases the only reliable information is in our records, frequently of great age and requiring long search. Reports on the title to 11 different public buildings were furnished and 93 reports on other titles were prepared.

By statute this is the final resting place of all contracts for government public work and for contracts of sale, deeds, leases, mortgages, etc., affecting government land. Fifty-eight of such documents were filed during the year.

The division is nearly self-supporting, the total receipts for the year having been ₱21,297.53 and the pay roll ₱26,752.

RECORDS DIVISION.

The records division has been the central office of record of the entire government of these islands since August 13, 1898. It records all the correspondence of the Governor General, executive departments, Philippine Commissioners, and the executive bureau. It is charged with the care of and is frequently called upon for the records of the office of the former military governors who preceded civil government. It is charged with the keeping of the approved plans of the guaranteed railroad lines, and also maintains the confidential files of the government.

The staff consists of a chief of division, assistant chief, and 3 clerks, all Americans; 38 Filipino clerks and messengers. Of these, 2 clerks and 5 messengers are employed in the mailing section.

On January 1, 1913, the card-number system of recording was abolished, and after a study of the systems in Washington and of the larger commercial houses in New York an adaptation of the decimal system of recording was adopted. As a filing system it is a success, but it is still open to argument whether it will be wholly satisfactory. The division is constantly required to give information and compile

statistics upon all sorts of questions; in fact, it is the only source of general statistics in the government; and for this a more comprehensive and elaborate system of indexing is necessary than in any business office or in most government offices. It is probable that there will have to be further adaptations to our needs.

Under the card-number system an accurate count of the number of new papers was kept. It has proved inconvenient to keep this count with the new system. For the period June to December, 1912, inclusive, the division received for record 35,877 new papers, the number for the corresponding period of the previous year having been 33,093. There were mailed during the period June to December, 1912, inclusive, 77,176, and during the period January to June, 1913, inclusive, 80,482, or a total of 157,658 during the fiscal year. These figures do not include publications. Using the mailing figures for comparison, it is safe to say that the new papers received for record during the period January to June, inclusive, were equal to those for the July-December period, as the January-June period is always larger than the July-December period, thus making a total of 71,750 new papers received for record as against 67,434 for the previous year; over 6 per cent increase.

TRANSLATING DIVISION.

This division contains an American chief and assistant chief, both accomplished in Spanish, and the latter able to work in French, Italian, German, and Dutch, and 8 Filipinos. As Act No. 2239 becomes practically operative the division should have much less Spanish work to do, but at present it not only makes all translations to and from the European languages and Tagalog for this bureau, but also all of the official translations of laws of the Legislature, and performs similar work for other bureaus and offices on request. Interpreters for public hearings and other like occasions are also furnished. During the year translations were made amounting to 13,357 folios, classified as follows:

	Folios.
To English:	
From Spanish.....	5,380
From other European languages.....	334
From Philippine dialects.....	309
From English:	
To Spanish.....	7,183
To other European languages.....	5
To Philippine dialects.....	146

The division also reviews the daily press, and press reports containing 416 folios of digested articles were prepared for the information of the Governor General.

OFFICIAL GAZETTE.

The executive bureau is officially responsible for the Official Gazette, which was authorized by Act No. 453 and placed under the control of this bureau by Act No. 1407. As a matter of fact it is compiled by the reporter of the supreme court and printed and circulated by the Director of Printing. The circulation on June 30 was, English edition, 447 copies, of which 299 were nominally free; Spanish, 1,799 copies, of which 1,052 were nominally free. This makes a total cir-

culatation of 2,246, of which 1,351 are free. The net expense to this bureau was ₱8,564.29 for the English edition and ₱3,611.25 for the Spanish, the difference resulting from the disproportion of paid subscriptions. The cost to the public, however, was ₱57,207.67, of which the court of land registration, or the suitors therein, paid ₱20,323.04.

The paper publishes the executive orders and proclamations and the statutes, all of which are also published by this bureau and furnished free to all interested officials in the islands some weeks before they appear in the Gazette, Decisions of the Supreme Court, the early promulgation of which is of real benefit to lawyers and courts of first instance; customs circulars, of interest only to deputy collectors and the importers, few of whom take the Gazette; and, lastly, advertisements of title registration cases. These advertisements are so highly technical in character as to convey no information except the names of the parties, to anyone, lawyer, layman, or surveyor, who does not possess a blue print of the survey. It is not within the province of this report to criticise this or make suggestions for legal procedure, but it may be said that the judges themselves would be glad to see a change to a simpler and less expensive method, the adoption of which would greatly benefit landowners and stimulate registration.

Without going so far as to recommend its discontinuance, it is believed the matter is worthy of consideration. The passage of Act No. 2239 made English the sole official language, and this should have the effect of rendering the publication of the Spanish edition unnecessary in the not distant future. This would materially reduce the cost.

BAGUIO SEASON.

Following the established custom, so much of the executive bureau staff as was practicable, 173 employees, together with about 8 tons of records and equipment, was transferred to Baguio on February 16, filling an entire special train. There seems to be a popular impression that in Baguio no work is done. This is very incorrect. Athletics are encouraged, but they are not allowed to interfere with government work. Regular office hours are maintained, and more work is accomplished in the same time than in Manila. The beneficial effect of the four seasons spent there, especially upon our Filipino employees, is remarkable. They are more alert and energetic, and there can be no doubt that the government is fully repaid by increased efficiency for the money expended. The additional expense to the bureau was ₱57,474.21.

We returned to Manila on May 25, earlier than usual, partly because of lack of funds. The order to return was regretted by a large majority of the employees, and was unfortunate, as the hot season had not ended, and the heat of Manila was probably more trying and enervating for those who returned from Baguio than had they remained in Manila. In order to obtain the fullest benefits from Baguio the season should continue until the end of June.

Respectfully submitted.

F. W. CARPENTER,
Executive Secretary.

The GOVERNOR GENERAL,
Manila, P. I.

APPENDIX A.

Bureau organization.

		TOTAL FOR BUREAU.
Executive secretary:		
American.....	P18, 000	
Assistant executive secretary:		
American.....	12, 000	
Second assistant executive secretary:		
Filipino.....	8, 000	
		45 Americans..... P196, 800 3 Spaniards..... 5, 412 160 Filipinos..... 142, 080 Assistant: Office of the chief clerk (including property section and custodian force)— 26 Americans..... 81, 700 2 Spaniards..... 3, 492 62 Filipinos..... 38, 304 Records division— 5 Americans..... 20, 300 33 Filipinos..... 23, 556 1 Spaniard..... 1, 920 Miscellaneous division— 21 Filipinos..... 28, 968 Second assistant: Division of archives, pat- ents, copyrights, and trade marks— 19 Filipinos..... 18, 752 Special agent (in charge of pro- vincial and municipal ad- ministration): 1 American (on leave) 8, 500 Acting special agent— 1 American..... 8, 000 Provincial division— 3 Americans..... 11, 400 12 Filipinos..... 15, 020 Special agents (in charge of civic improvements, etc.): 2 Americans..... 14, 500 Division of legislative records: 2 Americans..... 6, 800 5 Filipinos..... 2, 640 Translating division: 2 Americans..... 12, 000 8 Filipinos..... 10, 440

APPENDIX B.

SAMPLE REPORT OF SPECIAL AGENT.

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
 EXECUTIVE BUREAU,
Baguio, May 23, 1913.

SIR: I have the honor to make the following report and recommendations on the market project in the municipality of Vigan, Province of Ilocos Sur.

That the municipality of Vigan be given a loan of P35,000, at 4 per cent interest per annum, repayable in 10 equal annual installments, for the purchase of a market site and the construction of modern market buildings thereon, on condition that the municipality will appropriate P1,500 from the general fund for this project, and will

acquire the following site: Beginning at the northwest corner of Calles Municipal and Banuelos, point marked "A" on the plan prepared by the district engineer of Ilocos Sur, and extending along the north side of Calle Banuelos N. 70° 06' W., a distance of 57 meters to the corner of Calles Banuelos and Santa Cruz, point marked "B," along the east side of Calle Santa Cruz N. 22° 00' E., a distance of 78.60 meters to the corner of Calles Santa Cruz and Washington, point marked "C," along the south side of Calle Washington S. 70° 00' E., a distance of 51 meters to the corner of Calles Washington and Municipal, point marked "D," and along the west side of Calle Municipal S. 18° 10' W., a distance of 70 meters to point of beginning, "A," which site contains an approximate area of 3,993 square meters, and will set aside this site solely and perpetually for use for market purposes, together with the present site, which is situated on the south side of Calle Banuelos, opposite the proposed additional site, and is described as follows: Beginning at the northwest corner of Calles Salcedo and Municipal, point marked "E" on the plan prepared by the district engineer of Ilocos Sur, and extending along the north side of Calle Salcedo N. 70° W., a distance of 61.60 meters to the corner of Calles Santa Cruz and Salcedo, point marked "F," along the east side of Calle Santa Cruz N. 22° 15' E., a distance of 62.60 meters to the corner of Calles Banuelos and Santa Cruz, point marked "G," along the south side of Calle Banuelos S. 70° 30' E., a distance of 57 meters to the corner of Calles Municipal and Banuelos, point marked "H," and along the west side of Calle Municipal S. 18° W., a distance of 61 meters to the point of beginning, marked "E," which site contains an approximate area of 3,664 square meters.

Report follows:

Financial statement, general fund.

1909.

Revenues.....	₱30,765.37	
Disbursements.....	27,016.90	
Gain.....	3,748.47	
Improvements included in disbursements.....	7,858.45	
Excess of revenues over administrative expenses.....		₱11,606.92

1910.

Revenues.....	31,944.56	
Disbursements.....	25,104.21	
Gain.....	6,840.35	
Improvements included in disbursements.....	6,517.06	
Excess of revenues over administrative expenses.....		13,357.41

1911.

Revenues.....	20,998.26	
Disbursements.....	15,783.53	
Gain.....	5,214.73	
Improvements included in disbursements.....	3,693.23	
Excess of revenues over administrative expenses.....		8,907.96

1912.

Revenues.....	17,787.44	
Disbursements.....	16,203.18	
Gain.....	1,584.26	
Improvements included in disbursements.....	3,474.18	
Excess of revenues over administrative expenses.....		5,058.44

Total excess of revenues over administrative expenses for the fiscal years 1909, 1910, 1911, and 1912.....	38,930.73
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SUMMARY.

Population, 33,226; first-class municipality.

Assessed value of real estate in municipality subject to taxation, ₱1,312,290.

Borrowing capacity based on 5 per cent of the assessed value of real estate, ₱65,614.50.

Loans outstanding, payable in 1914 and succeeding years, none.

Maximum land tax, municipal general fund, one-fourth of 1 per cent; assessed for 1909, 1910, and 1911. No land tax assessed for 1912.

For the year 1912, 60 per cent of the land tax assessed for school purposes was paid prior to January 1, 1913.

Average saving in salaries for the fiscal years 1909, 1910, 1911, and 1912, 5.2 per cent of the revenue.

The revenues for 1912 were 42.1 per cent less than for 1909, which was caused by the separation of a number of barrios which were made independent municipalities.

One cedula sold for every 7.6 persons.

Transferred from general fund to school fund, 1909, ₱3,797.75; 1910, ₱4,224.80; 1911, ₱1,590; 1912, ₱2,268.50; total, ₱11,881.05.

Transferred to municipality of Caoayan, 1911, general fund, ₱284.98; school fund, ₱251.92; total, ₱536.90.

Transferred to municipality of Bantay, 1911, general fund, ₱284.98.

Transferred to municipality of San Vicente, 1911, general fund, ₱213.72; school fund, ₱78.51; total, ₱292.23.

Balance in general fund, December 31, 1912, ₱3,585.93.

Average excess of revenues over administrative expenses for the fiscal years 1909, 1910, 1911, and 1912, ₱9,742.68, which is 38.3 per cent of the revenue.

Total borrowing capacity based on excess of revenues over administrative expenses, ₱74,900, at 3 per cent interest, which would be ₱3,700 greater if the maximum land tax had been assessed for 1912; ₱78,600 is ₱12,985 greater than the total borrowing capacity based on 5 per cent of the assessed valuation.

Loan recommended, ₱35,000, at 4 per cent interest per annum, repayable in the following installments with interest:

Year.	Principal.	Interest.	Total.
First.....	₱3,500	₱1,400	₱4,900
Second.....	3,500	1,260	4,760
Third.....	3,500	1,120	4,620
Fourth.....	3,500	980	4,480
Fifth.....	3,500	840	4,340
Sixth.....	3,500	700	4,200
Seventh.....	3,500	560	4,060
Eighth.....	3,500	420	3,920
Ninth.....	3,500	280	3,780
Tenth.....	3,500	140	3,640
Total.....	35,000	7,700	42,700

On a loan for this amount, the first repayment with interest will amount to ₱4,900 and the average repayment with interest to ₱4,270, which will leave an average saving of ₱5,472.68, available for other improvements during the continuance of the loan.

Vigan presents exceptional financial conditions due to the separation of the municipalities of Bantay, San Vicente, and Caoayan in 1911 when the revenues for general purposes were reduced from ₱31,944.56 in 1910 to ₱20,998.26 in 1911, and by the non-assessment of the land taxes for general fund for 1912, the revenues were reduced from ₱20,998.26 in 1911 to ₱17,787.44 in 1912.

The present net income for general purposes, when land taxes are assessed, is estimated at ₱8,000 per annum.

The market is at present let by contract for ₱3,726.60 per annum, and the contract will not expire until December 31, 1913. If the market were handled by administration, it would produce ₱5,000 per year, which would increase the normal savings to ₱9,000 and would allow the municipality to undertake the proposed market improvements and leave a safe margin for other improvements.

The loan herein recommended will purchase the site, estimated to cost ₱5,000, build one central building 24 meters wide and from 12 to 15 tiendas, 6 by 4 meters, of the closed type.

Statement showing the income from taxation and operation expenses in the school fund for the fiscal years 1909-1912, inclusive.

Year.	Income.	Salaries.	Other administrative and maintenance expenses.	Total operation expenses.
1909.....	P6,788.24	P8,668.73	P486.45	P9,155.18
1910.....	6,743.01	9,589.43	968.53	10,557.96
1911.....	4,159.22	5,160.92	757.51	5,918.43
1912.....	3,501.09	4,347.66	613.80	4,961.46
Total.....	21,191.56	27,766.74	2,826.29	30,593.03

The average amount expended for salaries for the fiscal years 1909, 1910, 1911, and 1912 is 31 per cent in excess of the income for school purposes.

The amount expended for salaries for school purposes for 1912 was 49.8 per cent less than for 1909.

The revenue received for 1912 was 48.4 per cent less than for 1909.

The school budget for 1913 follows:

Balance, January 1, 1913.....	P1,160.65
Income from taxation.....	3,975.00
Transferred from general fund.....	4,800.00
	P9,935.65
Expenditures:	
Salaries.....	6,063.40
Rentals.....	600.00
Incidentals.....	145.00
Maintenance.....	125.00
Purchase of site.....	2,300.00
Central school building.....	150.00
Equipment.....	550.00
	9,933.40
Balance.....	2.25

Attention is invited to the fact that the current school expenses, as shown by this budget, exceed the income from taxation by P2,958.40. This fact was taken into consideration in making the market loan, and a sufficient saving was allowed over and above the amount required to repay the loan to meet this condition.

The municipality has expended the following amounts from general fund on improvements from 1909 to 1912, inclusive: Streets and culverts, P16,107.16; ferries, P109.47; market, P304.91; slaughterhouse, P204.43; municipal building, P657.99; survey and registration of property, P985.15; equipment, P1,484.73; fire apparatus P1,112.36; and various projects, P576.72; total, P21,542.92. During the same period they transferred from the general fund to the school fund P11,881.05.

The budget for the present year, 1913, for the general fund shows appropriations for the following improvements: Alterations to municipal building, P600; streets and culverts, P3,053; investigation of water system, P100; equipment, P470; various projects, P632; and transfers to schools, P4,800.

The municipal building, constructed more than 60 years ago, is a two-story stone structure, dimensions 27.5 by 11.5 meters, with a tile roof. There is a frame balcony 1.5 meters wide, along the entire front and one side of the second story. The floor of the first story is part tile and part wood, and the partitions are brick; in the second story the partitions are brick and the ceiling wood. The first story is devoted to the jail, police quarters, treasurer's office, and several storerooms, and the second story to the remaining municipal offices. The building is valued at P15,000, but it will take P3,000 to put it in repair.

It is located on lot No. 1, bureau of lands plan No. 100a, facing on Calle Burgos and the provincial plaza. The site has an area of 2,422 square meters.

The west central school building is a one-story frame structure, dimensions 28.3 by 10 meters, erected on frame harigues, 2.5 meters from the ground, with an iron roof. A porch extends across the entire front of the building, and the interior partitions

and ceiling are of suale. There are five classrooms which will accommodate a total of 300 pupils. The building was erected in 1906, at a cost of ₱6,120, of which ₱6,000 was borrowed from the Province, and has been entirely repaid.

It is located on lot No. 3, bureau of lands plan No. 100c, which is situated at the corner of Calles Washington and Govantes, and has an area of 1,108 square meters.

The east central school building is a two-story stone structure, with an iron roof, erected over 70 years ago for use as a tribunal for the mestizos. The first floor is tile with stone partitions and the floor, partitions, and ceiling of the second story are wood. There are seven classrooms which will accommodate 250 pupils. It is valued at ₱6,000.

The building is located on lot No. 4, bureau of lands plan No. 100d, which is situated at the corner of Calles Salcedo and McKinley, and has an area of only 544 square meters.

The intermediate school, with the exception of one grade, is located in a two-story stone building, with an iron roof, which the municipality rents for ₱40 per month. The first story has a concrete floor and wood partitions. On the second the floor, partitions, and ceilings are of wood. There are four rooms on the second floor and two on the first, which are used as classrooms. This building can accommodate 300 pupils. A part of the intermediate school is accommodated in the provincial high school.

Vigan urgently needs a new central school building, but is not able financially to appropriate from ₱10,000 to ₱15,000 toward the construction of a 16-room building which, I understand, is the requirement to obtain the allotment of the Bureau of Education. The fact should not be overlooked that the municipality has been compelled to meet a deficit of ₱9,401.47 in the school fund in the last four years in operating expenses alone by transfers from the general fund, and that the present conditions require an annual transfer of from ₱2,000 to ₱3,000 to meet current expenses.

In view of these conditions, it is most urgently recommended that ₱25,000 of the funds available for construction of central schools in provincial capitals be assigned by the secretary of public instruction to this municipality without requiring the municipality to put up an additional amount which they can not afford. They have made an appropriation of ₱2,300 in the school budget for this year for the purchase of a site for the new building, and have ₱1,720 deposited with the provincial treasurer for this project. With ₱25,000 they can construct a 10 or 12 room building so arranged that it can be developed into a 20-room building when funds are available. By this plan they can have the use of a part of the building now, which will greatly improve the school conditions.

Vigan is in urgent need of a water system, which will cost ₱188,000, as estimated by the district engineer. They will not be permitted to sell bonds for such a project in excess of ₱65,000, which is 5 per cent of the assessed value of the land. It is possible that the market may show such marked increase in revenues in the next few years that they can construct this water system with some aid from the insular Government.

Two artesian wells have been bored with a steam rig to a depth of 700 feet, at a cost of ₱4,000, both of which proved to be failures. Apparently the only hope to obtain potable water is by constructing the expensive system referred to above.

The municipal cemetery site is situated in the southwestern part of the town, on Calle Rizal extended, about 1 kilometer distant from the plaza. It is situated on high land, and is fenced in with barbed wire. There are a number of vaults in the cemetery owned by the municipality, which rent for from ₱1 to ₱5 per year.

The present market occupies the entire beach bounded on the north by Calle Banuelos; east, Calle Municipal; south, Calle Salcedo; and west, Calle Santa Cruz, with an area of 3,278 square meters. The market building, which is of brick, with an iron roof, in the form of a rectangle with an open court, was first constructed over 70 years ago, and was entirely remodeled within the past 20 years. The outside dimensions of the building are 58.4 by 44.4 meters, with each wing or side 7 meters wide. On the longer sides of the building there are 28 tiendas separated by brick partitions facing the interior of the market, with windows in the rear or outside wall. These tiendas are closed by a wooden front much the same as modern tiendas. The tiendas are generally used as storerooms, and the merchants using them display their stock in the passageway in front, facing the central court. The tiendas which are about 3 meters wide by 2.5 meters deep rent for from ₱2 to ₱3 per month, according to the location. The present building occupies about three-fourths of the market site. All the meat, fish, and transient business is carried on in the open court, with only the trees and small nipa lean-to as a protection against the sun or rain.

The rents for the covered passageway in front of the tiendas and the open court varies from 2 to 30 centavos per square meter per day.

The market is held every day, morning and night. The market on Sundays and fiestas is somewhat larger than the regular week days. The space inclosed by the building is now too small to accommodate all, and many of the small merchants are forced outside on the part of the market plot next to Calle Santa Cruz.

The rents have been let by contract for the past three years, and the present contract will not expire until December 31, 1913. The amounts received were as follows:

1910.....	₱3, 546. 00
1911.....	3, 546. 00
1912.....	3, 726. 60
1913 (contracted).....	3, 726. 60

If the rents in this market were collected by administration, the net revenue would amount to ₱6,000. It is safe to estimate that the annual returns when the proposed buildings are completed will be over ₱8,000 per annum.

The present site is too small, and it was decided to extend the market site by the purchase of the block to the north, bounded on the north by Calle Washington; east, Calle Municipal; south, Calle Banuelos; and west, Calle Santa Cruz, which contains an approximate area of 3,993 square meters. It is estimated that this site can be purchased for from ₱5,000 to ₱6,000. It has a large frontage on Calle Municipal, the most important street bordering on the present market site, and is the most favorable extension possible. It is the intention at present to develop the new site and leave the old building to take care of the overflow crowds, or to use it as a fish and meat market.

It is recommended that the attached plan of the market site, showing the present site and proposed extension, prepared by the district engineer of Ilocos Sur, be referred to the consulting architect for the preparation of preliminary plans, as follows:

Plan No. 1.—One central building, 47.5 by 21 meters, located on the new site lengthwise to and 17 meters back from the new street line on Calle Municipal, with one end abutting on the new street line on Calle Banuelos, and double tiendas, 5 by 4 meters, closed type, facing on the new street line on Calles Municipal and Washington, and single tiendas, 5 by 4 meters, with backs abutting on the new street line on Calle Santa Cruz; and one building, 42.5 by 21 meters, located on the present market site endwise to and abutting on the present street line on Calle Banuelos, directly opposite the proposed central building on the new site, and double tiendas, 5 by 4 meters, closed type, facing on Calle Municipal and Calle Salcedo, with single tiendas, 5 by 4 meters, abutting on Calle Santa Cruz; Calle Municipal to be widened to 12 meters, Calles Salcedo and Washington to 13 meters, and Calle Santa Cruz to 10 meters; all land necessary to be taken from the market plot, and Calle Banuelos to be widened to 14 meters, the land necessary to be taken from the new site.

Plan No. 2.—One central building, 47.5 by 24 meters, located on the new site endwise to and abutting on the new street line on Calle Banuelos; double tiendas, 5 by 4 meters, facing on Calle Washington, and single tiendas, 5 by 4 meters, opened from the counter up in the rear and abutting the new street lines on Calles Municipal and Santa Cruz; and one central building, 42.5 by 24 meters, located on the present market site endwise to and abutting on the present street line on Calle Banuelos opposite the proposed building on the new site; double tiendas, 5 by 4 meters, closed-type, facing on Calle Salcedo, and single tiendas, 6 by 4 meters, opened in the rear from the counter up, and abutting on Calles Santa Cruz and Municipal; streets to be widened as indicated in plan No. 1.

Plan No. 3.—Same arrangement as in plan No. 1, with the substitution of two central buildings 18 meters wide for two buildings 21 meters wide; the extra 3 meters width gained in the reduction of buildings to be used in widening Calle Municipal to 15 meters instead of 12 meters.

Very respectfully,

Special Agent.

EXECUTIVE SECRETARY, Manila.

Authorization recommended:

Executive Secretary.

Approved:

Governor General.

Inclosures: 1. Street map of the municipality of Vigan, showing the location of the different provincial and municipal properties, with the present and proposed market sites indicated with red pencil and numbered 1 and 2, respectively, prepared by the bureau of lands.

2. Plan of the present market site and proposed extension, prepared by the district engineer of Ilocos Sur.

3. Plan of municipal building plot, prepared by the bureau of lands.

4. Plan of the west-central school building plot, prepared by the bureau of lands.

5. Plan of the east-central school building plot, prepared by the bureau of lands.

APPENDIX C.

Comparative statement of estimated receipts of markets enumerated in annual report of executive secretary for fiscal year 1912 and actual receipts for same period.

Municipality.	Province.	Amount invested.	Receipt from old market	New market.		Per cent- age on in- vestment.
				Esti- mated receipts.	Actual receipts.	
Iloilo.....	Iloilo.....	P69,302	P13,057	P25,629	P31,133.69	44.9
Pagsanjan.....	Laguna.....	19,531	3,001	5,961	6,531.18	33.4
San Pablo.....	do.....	24,000	2,160	12,392	14,209.60	59.2
Angeles.....	Pampanga.....	9,145	4,091	5,419	7,555.60	82.6
San Fernando.....	do.....	19,679	3,590	6,472	8,528.86	43.3

APPENDIX D.

Estimated receipts from new markets (opened fiscal year 1913) for fiscal year 1914.

Municipality.	Province.	Inter- est paid on loans.	Amount invested.	Receipts from old market, 1912.	Esti- mated receipts from new market.	Percent- age earned on in- vestment.	Percent- age earned, increase receipts.
		<i>Per cent.</i>					
Balayan.....	Batangas..	3.00	P15,000	P1,428.10	P4,100	27	17.4
Lipa.....	do.....	3.27	35,000	2,317.64	9,110	26	19.4
Hagonoy.....	Bulacan..	3	25,000	1,953.42	4,713	18.8	11
Maycauayan.....	do.....	3	20,000	1,950.54	3,361	16.8	7.5
Cavite.....	Cavite.....	3	45,000	6,803.56	11,963	26.5	11.4
Oton.....	Iloilo.....	3.27	25,000	7,344.74	10,440	41.7	12.3
Calocan.....	Rizal.....	3.27	25,000	1,146.60	2,727	10.9	6.3

New markets in San Carlos, Pangasinan, and Paombong, Bulacan, were open to the public less than a full month before the close of the year and collections are not shown above.

The market in Obando, Bulacan, was in use during May and June, but May was the month of the municipal fiesta and receipts, as is usual in that municipality, were practically double what is considered to be the normal collection, and any estimate based on receipts for these months would give an inflated result.

APPENDIX E.

Appointments during the fiscal year 1913.

	Ap- point- ments by Govern- or General and Phil- ippine Com- mis- sion.	Ap- point- ments and des- igna- tions by Govern- or General only.	Decli- nations.	Resig- nations.	Reliefs.	Rein- stated with warn- ing or reprim- and, sus- pended or other- wise dis- ciplined, resig- nations required or accept- ed.	Remov- als.	Deaths.
Insular officers, including judges and officers of the bureau of navigation.....	34	12	1	4				1
Provincial officers.....	24	29		12	1	6	1	
City of Manila.....	6	1		3		2		
City of Baguio.....	4	9		3				
Municipal officers.....		80				15	28	34
Justices of the peace.....	159		6	24	48	4	9	4
Auxiliary justices of the peace.....	161		9	59	9	5	2	3
Candidates and alternates, West Point.....	6							
Total.....	394	131	16	105	58	32	40	42

APPENDIX F.

Charges against officials and action taken.

Disposition, etc.	Presidents.	Vice presidents.	Secretaries.	Councilors.	Justices of the peace.	Auxiliary justices of the peace.	Chiefs of police.	Sergeants.	Policemen.	Total.	Grand total.
Cases tried:											
Officers suspended pending final decision.....	33	10	3	36	10	4	1	3	2	102	....
Officers not suspended pending final decision.....	17	4	1	17	6	3	1	1	....	50	....
Total.....	50	14	4	53	16	7	2	4	2	152	152
Action taken:											
Found guilty—											
Removed and disqualified from holding public office.....	4	....	1	1	7	2	1	....	....	16	....
Removed.....	9	3	1	9	2	....	....	1	1	26	....
Resignations required or accepted.....	....	....	....	....	3	4	....	....	....	7	....
Reinstated with warning or reprimand, sus- pended, or otherwise disciplined.....	4	....	....	11	1	1	1	....	....	18	....
No punishment owing to expiration of term.....	6	....	1	6	....	....	....	....	....	13	....
Total.....	23	3	3	27	13	7	2	1	1	80	80
Found not guilty—											
Reinstated or continued in office.....	8	3	....	8	2	....	....	1	....	22	....
Not reinstated owing to expiration of term.....	....	....	....	....	....	....	....	....	....	....	....
Charges dismissed.....	1	2	1	1	....	....	....	....	....	5	....
Total.....	9	5	1	9	2	....	....	1	....	27	27
Filed without action by the Governor General.....	18	6	....	17	1	....	....	2	1	45	....
Total number of cases disposed of.....	32	8	4	36	15	7	2	2	1	107	....
Grand total.....	50	14	4	53	16	7	2	4	2	152	152

APPENDIX G.

Applications for pardon and action taken.

Petitions on hand at the expiration of the last fiscal year.....	151
Petitions received during this fiscal year.....	1,095
Full pardons granted.....	29
Remissions of unserved portions of sentences.....	266
Commutations of sentences.....	42
Parole granted.....	3
Reprieves issued.....	10
Denials.....	779
Petitions filed without action.....	192
Petitions pending decision, investigation completed.....	8
Petitions under investigation.....	141

COMMITTEE ON PARDONS.

Cases considered.....	133
Cases pending.....	64

APPENDIX H.

Violations of the election law.

Provinces.	Number of criminal complaints filed.	Number of persons involved.	Number of accused convicted.	Number of accused acquitted.	Number of accused whose cases have been dismissed.	Number of accused who died before hearing.	Number of accused whose cases are pending hearing.	Number of accused whose cases are pending decision.	Number of cases under investigation.
Albay.....	31	344	161	3	146	1	33		
Ambos Camarines.....	10	47	19	16	8		4		
Antique.....	1	1					1		
Bataan.....	4	5					5		
Batanes.....									
Batangas.....	1	1			1				
Bohol.....	4	20	4	1	15				2
Bulacan.....	1	1			1				
Cagayan.....	16	40	27	5	1		7		8
Capiz.....	15	38	28	4	4		2		2
Cavite.....	3	2	1	1					
Cebu.....	2	8		6					
Ilocos Norte.....	5	8	5		3				
Ilocos Sur.....	1	1					1		8
Iloilo.....	4	50	28	21	1				
Isabela.....									13
Laguna.....	1	1			1				
La Union.....	1	1	1						
Leyte.....									82
Manila.....									
Mindoro.....									
Misamis.....	23	34	29	5					32
Nueva Ecija.....	2	5	3	2					
Occidental Negros.....									
Oriental Negros.....	5	6	1	3	2				
Palawan.....									
Pampanga.....	13	69	7	12	31	1	6	12	
Pangasinan.....	6	6	1				5		
Rizal.....	2	3			3				186
Samar.....	34	49	6	5	2		36		1
Sorsogon.....	12	46	20		11	1	14		1
Surigao.....									
Tarlac.....	1	1						1	1
Tayabas.....	8	9	2	5	2				4
Zambales.....									
Total.....	206	794	343	89	232	3	114	13	340

Of the 343 persons convicted of violation of the election law, 256, or 75 per cent, were for falsely swearing that they were qualified electors, when as a matter of fact they were delinquent in the payment of taxes and therefore disqualified either to register as electors or vote.

APPENDIX I.

Number and nationality of provincial, municipal, and township officers.

Years.	Provincial officers.					Municipal and township officers, including justices and notaries public.				
	Americans.		Filipinos.		Total.	Americans.		Filipinos.		Total.
	Num-ber.	Per-cent-age.	Num-ber.	Per-cent-age.		Num-ber.	Per-cent-age.	Num-ber.	Per-cent-age.	
1903.....	86	26.54	238	73.46	324	24	0.17	14,102	99.83	14,126
1904.....	87	37.82	143	62.18	230	44	.39	11,289	99.61	11,333
1905.....	80	24.60	246	75.40	326	58	.50	10,725	99.50	10,783
1906.....	60	24.69	183	75.31	243	68	.63	10,774	99.37	10,842
1907.....	50	34.25	96	65.75	146	88	.77	11,350	99.23	11,438
1908.....	49	32.66	101	67.34	150	82	.69	11,760	99.31	11,842
1909.....	47	31.54	102	68.46	149	81	.66	12,275	99.34	12,356
1910.....	39	27.86	101	72.14	140	102	.81	12,417	99.19	12,519
1911.....	43	29.25	104	70.75	147	108	.84	12,685	99.16	12,793
1912.....	44	31.20	97	68.80	141	132	1.07	12,183	98.93	12,315
1913.....	42	27.45	111	72.55	153	111	.83	13,324	99.17	13,435

APPENDIX J.

Number and nationality of provincial officers.

	Ameri-cans.	Filipi-nos.	Total.
Governors.....	7	31	38
Treasurers.....	20	13	33
Supervisor treasurers.....	1	.....	1
Secretary treasurers.....	2	2	4
Secretaries.....	1	.....	1
Supervisors.....	1	.....	1
Thrd members.....	.....	30	30
Fiscals.....	1	29	30
Lieutenant governors.....	9	6	15
Total.....	42	111	153

Percentage of total:

Americans..... 27.45

Filipinos..... 72.55

Provinces organized under Act No. 83..... 31

Provinces organized otherwise..... 7

Total..... 38

APPENDIX K.

Number and nationality of municipal and township officers.

	Ameri- cans.	Filipinos.	Total.
Presidents.....	2	823	825
Vice presidents.....	1	824	825
Secretaries.....		655	655
Treasurers.....		655	655
Secretary treasurers.....		169	169
Councilors.....	6	7,694	7,700
Justices of the peace.....	12	675	687
Auxiliary justices of the peace.....	4	497	501
Notaries public, including city of Manila.....	86	1,332	1,418
Total.....	111	13,324	13,435

Percentage of total:

Americans.....	0.83
Filipinos.....	99.17

Municipalities.....	740
Townships.....	85
Settlements.....	1,991
Total.....	2,816

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APPENDIX L.

Nature of charges.

	Neglect or duty.	Abuse of official position.	Ignorance and incapacity.	Bad habits and immorality.	Extortion.	Larceny and bandolerismo.	Malversation and breaches of trust.	Bribery and kindred crimes.	Forgery and falsification.	False arrest.	Crimes of violence.	Violation of law (election, etc.), executive orders, and municipal ordinances.	Slander, disrespect, and use of bad language.	Interference in religious affairs.	Perjury.	Total.	Grand total.
Guilty:																	
Presidents.....	12	16	4	.....	2	1	7	.....	2	5	.....	4	.....	2	2	57	.....
Vice presidents.....	.....	2	.....	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	6	.....
Secretaries.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	4	.....
Councilors.....	9	5	2	.....	.....	.....	2	1	.....	.....	.....	12	1	.....	1	33	.....
Justices of the peace.....	10	17	6	1	1	.....	2	.....	.....	.....	1	1	.....	1	1	41	.....
Auxiliary justices of the peace.....	1	5	3	1	1	.....	.....	.....	.....	.....	1	2	1	.....	.....	15	.....
Chiefs of police.....	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
Sergeants.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....
Policemen.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
Total.....	33	47	17	3	5	1	11	2	3	6	3	22	2	3	5	163	163
Not guilty:																	
Presidents.....	3	8	1	.....	.....	.....	5	.....	1	2	.....	4	.....	1	.....	25	.....
Vice presidents.....	4	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	9	.....
Secretaries.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....
Councilors.....	3	1	2	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	1	.....	13	.....
Justices of the peace.....	.....	2	1	.....	.....	.....	1	.....	.....	.....	.....	1	1	.....	.....	6	.....
Auxiliary justices of the peace.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chiefs of police.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sergeants.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
Policemen.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	10	12	4	.....	.....	1	7	.....	1	2	7	6	1	4	.....	55	55
No action:																	
Presidents.....	10	14	2	1	2	.....	4	.....	1	1	.....	6	1	2	2	46	.....
Vice presidents.....	1	2	.....	.....	.....	1	2	.....	1	.....	.....	1	.....	1	.....	9	.....
Secretaries.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Councilors.....	1	5	.....	.....	1	.....	4	.....	.....	.....	.....	12	.....	3	1	27	.....
Justices of the peace.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Auxiliary justices of the peace.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chiefs of police.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sergeants.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3	.....
Policemen.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
Total.....	13	23	3	1	3	1	10	.....	2	1	.....	21	1	6	3	88	88
Grand total.....	56	82	24	4	8	3	28	2	6	9	10	49	4	13	8	306	306

REPORT OF THE SECRETARY OF THE INTERIOR.

THE GOVERNMENT OF THE PHILIPPINE ISLANDS,
DEPARTMENT OF THE INTERIOR,
Manila, September 15, 1913.

GENTLEMEN: I have the honor to present the twelfth annual report of the operations of the Department of the Interior, which, except in certain instances clearly set forth, covers the year ended June 30, 1913.

WORK FOR THE NONCHRISTIAN TRIBES.

The success or failure of work for the people of any given non-Christian tribe depends to a very large degree upon the personality of the man in immediate charge of it. The more primitive peoples of the Philippine Islands know little of laws and still less of governmental policies, but they understand individuals; and when a man who, through long years of just and considerate treatment, has won their good will leaves them for whatsoever cause, the immediate results are likely to be unfortunate. It is only after several such changes have occurred without any departure from a policy of protection and helpfulness that they begin to understand that they are safe even if old and trusted friends leave the service. For this reason especial importance attaches to the fact that on December 31, 1912, Gov. William F. Pack of the Mountain Province resigned his office in order properly to look after private interests in the Isle of Pines. He entered the special government service on November 15, 1901, as governor of the Province of Benguet, now a subprovince of the Mountain Province, and served continuously until the date above mentioned, having been promoted to the governorship of the Mountain Province on March 15, 1909. No other Philippine provincial governor has held office for anything like so long a period since the American occupation.

Gov. Pack was a man of original ideas. He was a tireless worker. He uncomplainingly endured endless fatigue, bore many other hardships, and faced grave danger on numerous occasions. I feel greatly indebted to him for practical suggestions which have been most useful in shaping policies, as well as for his unswerving loyalty in carrying out policies when once decided upon. His resignation was a great loss to the special provincial government service.

The service sustained another very serious loss in the resignation of Lieut. Gov. Jeff D. Gallman, of the subprovince of Ifugao, to whose personal efforts the extraordinary success of the work which has been carried on for the Ifugaos was very largely due.

The vacancy left by the resignation of Gov. Pack was filled by the promotion of Mr. E. A. Eckman, lieutenant governor of

Benguet. That caused by the resignation of Lieut. Gov. Gallman was filled by the transfer of Capt. O. A. Tomlinson, Philippine Constabulary, acting governor of Nueva Vizcaya.

The governorship of Nueva Vizcaya thus left vacant was filled by the appointment of Mr. Leo J. Grove, whose experience while an employee of the Bureau of Education had especially fitted him for the position.

The failing health of Gov. Evans, of Palawan, has made it necessary to transfer him to the subprovince of Benguet, where he is temporarily taking the place of Lieut. Gov. Detrick, who had been promoted to the position vacated by Gov. Eckman. Mr. Detrick is serving temporarily as acting governor of Palawan during the enforced absence of Gov. Evans.

Mr. Eugene de Mitkiewicz was appointed lieutenant governor of Amburayan upon the promotion of Mr. Detrick to Benguet.

FAILURE TO SECURE ANTISLAVERY LEGISLATION.

During the last session of the Legislature a final effort was made by the Philippine Commission to secure legislation prohibiting and penalizing slavery, involuntary servitude, peonage, and the sale or purchase of human beings in the Philippine Islands. On October 24, 1912, that body passed an act designed to accomplish this end. It was tabled by the Philippine Assembly on January 8, 1913, without discussion.

I subsequently prepared a report on slavery and peonage in the Philippine Islands for the purpose of demonstrating clearly the existence of these evils in this country. In this report I recommended that the need of legislation be brought to the attention of the Congress of the United States because of the long continued refusal of the Philippine Assembly even seriously to consider any of the several laws dealing with these subjects passed by the Commission.

On May 17, 1913, the Commission adopted the following resolution:

Whereas the act of Congress passed July 1, 1902, "temporarily to provide for the administration of the affairs of civil government of the Philippine Islands and for other purposes" provides that "neither slavery nor involuntary servitude except as a punishment for crime whereof the parties shall have been duly convicted shall exist in said islands"; and

Whereas the Supreme Court of the Philippine Islands in the case of the United States *v.* Cabanag (8 Phil. Rep., 64), decided on March 16, 1907, that "there is no law applicable here, either of the United States or of the Archipelego, punishing slavery as a crime"; and

Whereas, in order to remedy this condition and in accordance with the above-mentioned provisions of the said act of Congress, the Philippine Commission in its exclusive legislative jurisdiction over all that part of the Philippine Islands inhabited by Moros or other non-Christian tribes passed Act No. 2071, and as a branch of the Philippine Legislature has, in four successive sessions, passed a bill prohibiting and penalizing slavery, involuntary servitude, peonage, or the sale of human beings; and

Whereas during each of said sessions the Assembly has failed to concur in the passage of such Act: Now, therefore, be it

Resolved, That the Governor General be requested to send to the Secretary of War a copy of the proposed law entitled "An act prohibiting slavery, involuntary servitude, peonage, and the sale or purchase of human beings in the Philippine Islands and providing punishment therefor," as passed by the Commission in the first session of the Third Legislature, but which failed of passage in the Assembly, with the recommendation that a copy of the proposed law be sent to Congress with

the request that the necessary legislation be enacted to render fully effective the above-mentioned provisions of the act of Congress of July first, nineteen hundred and two.

My report and other pertinent matter have been transmitted to the Secretary of War so that Congress will now have some, at least, of the facts before it and can decide whether or not it wishes to give effect to that provision of its act of July 1, 1902, which provides:

That neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist in said islands.

Meanwhile it continues to be true that slavery and peonage are both prohibited and penalized in the provinces under the exclusive legislative jurisdiction of the Commission, to wit, the Moro Province, the Mountain Province, Agusan, and Nueva Vizcaya, while they are not penalized in the remaining 34 provinces of the Philippines. The following recent case illustrates the embarrassment which results.

A Bukidnon man was held for a number of years by one Racines for debt. He was badly treated, and at the suggestion of another Filipino set the house of his master on fire in order to revenge himself. He was then tried and sentenced to Bilibid Prison, where he now is. He left two sons. Quite recently they were summoned to the house of Racines by a messenger, were then seized, and were informed that as their father had not finished working out his debt they must do so. They were held as slaves until rescued by Maj. John Fawcett, Philippine Constabulary, on January 10, 1913. On complaint of Albino Noble, assistant to the lieutenant governor of Bukidnon, Racines was prosecuted in the Court of First Instance for slave keeping, the charge specifying:

That on a day of the month of September, 1912, in the town of Lumbia, in the subprovince of Bukidnon, Province of Agusan, Philippine Islands, the accused, Lorenzo Racines, illegally and criminally seized two Monteses (Bukidnons), minor children, called Ramon Pitoy and Toto Pitoy, and kept them working on his land without any compensation and against their will, thus violating the law.

The provincial fiscal made the following motion:

Now comes the provincial fiscal in the above-entitled case and prays for the dismissal of this cause. The house in which Ramon Pitoy and Toto Pitoy were held in slavery by defendant is and was within the jurisdiction of the Province of Misamis to which Act No. 2071 is not applicable; hence this motion of dismissal with costs taxed de oficio,

and the case was dismissed, it having been shown by a special survey that the house of the accused was 100 yards over the boundary line, although most of his land was in the subprovince of Bukidnon. A condition such that it is necessary for the Bureau of Lands to run a survey in order to determine whether or not a slaveholder shall be punished leaves much to be desired.

MISCONDUCT OF AN OFFICIAL.

The foundation of the whole policy of the Department of the Interior in its management of the non-Christian tribes of the Philippines is the just and humane treatment of the weakest, most ignorant, and most defenseless savages.

On April 30, 1913, Col. John B. Bennet, Philippine Constabulary, verbally reported to me that on April 24, he had found in the constabulary

barracks at Cervantes an Igorot prisoner tied by his raised hands in such a manner that his heels did not touch the floor, so that he was suffering severe bodily pain. The corporal who had tied the man in this position stated that he had done so by verbal order of the lieutenant governor, Mr. W. A. Miller. As my annual inspection trip through this subprovince was to be made a few days later, I took no action until I could look into the facts on the ground. Lieut. Gov. Miller emphatically denied having ordered the man tied in such fashion or otherwise made to suffer pain. The Igorot himself testified that when Lieut. Gov. Miller had entered the barracks and seen him tied up he had immediately ordered him cut down, but as Miller denied having even known of the infliction of the torture prior to the time when informed of it by Col. Bennet, this testimony did not exculpate him. He admitted having given an order to have this man taken out and shot when he turned him over to the constabulary corporal, and having arranged to have a shot fired shortly after he had been taken out, his object being to terrorize a prisoner charged with robbery from whom he wished to extract a confession.

This latter act alone afforded sufficient ground for Miller's immediate separation from the service, and I therefore brought the matter to the attention of the Governor General. After making personal investigation, he removed Miller and directed an officer specially detailed from the bureau of justice to determine whether the evidence was sufficient to justify a criminal prosecution. The decision reached was that prosecution was warranted. Lieut. Gov. Miller's conduct in this matter was without precedent, justification, or excuse, and if he was actually guilty of ordering this man tortured in order to extract information from him it is to be hoped that the penalty imposed will be such as effectively to deter any officer or employee of any provincial government from committing such a crime in future.

THE DIFFICULTY OF PROVIDING LANDS FOR PARTIALLY CIVILIZED MEMBERS OF NONCHRISTIAN TRIBES.

When members of non-Christian tribes are persuaded to give up nomadic habits and permanently to settle on lands which it is desired that they should be allowed to cultivate, the question of conveying to them title to such lands is one which presents serious difficulties. The seminomadic habits of many of these tribes are largely due to the fact that as soon as they have cleared land and brought it under cultivation they are driven from it by false claims of ownership on the part of their civilized neighbors. They are often willing enough to work if assured that they will not be deprived of the fruits of their labors. Most of them are at the outset absolutely without means. They do not, as a rule, wish to rent land, but desire to secure a title in fee simple so that they can never be dispossessed. They have not sufficient money with which to purchase, nor do they need anything like the 40 acres each which are obtainable under homestead applications. After a good deal of consideration I have decided upon the following procedure to meet this difficulty in a number of cases: Request the Governor General to reserve land as a town site for members of the tribe in question only; sub-

divide the town site into small lots in accordance with the provisions of chapter 6 of the public-land act, thus excluding from ownership or occupancy of these lots any persons other than members of the tribe; sell the lots, subject to the condition of occupancy and cultivation, at the pro rata charge for a homestead, namely, ₱1.25 per hectare. Few wild men can, with the assistance of their families, cultivate more than 1 or 2 hectares of land, and those persons who are without means to pay the very small charge necessary to gain title to the tracts obtainable under such conditions can be assisted by providing them with opportunity to labor on public works within the town sites. Many of the wild men set great store by documents of whatsoever sort, and ability to give a man a "papelito" (little paper), setting forth the fact that he is the owner of a tract of land upon which he had entered and which he is cultivating, will be a very powerful influence in inducing others to leave their mountain homes and to enter upon a more peaceful and orderly life. It is purposed to give this plan a trial on the reservation of the Tagbanuas at Aborlan, in the island of Palawan, and, if it proves successful, to apply it elsewhere.

SITUATION REVIEWED BY PROVINCES AND SUBPROVINCES.

NUEVA VIZCAYA.

The progress made in road and trail construction has been most satisfactory, and the methods employed in the maintenance of existing roads and trails have left little to be desired. By January or February, 1914, dirt work on the new road to the Isabela border should be finished, and as soon as the corresponding road in Isabela is completed to the boundary, Nueva Vizcaya will at last have a good outlet for its rice, which is so greatly needed in the former province. More than half of this road is already surfaced. The remainder can be surfaced little by little as funds become available, but until this is done its use for wheeled transportation should be prohibited during the height of the rainy season; otherwise it will be badly cut up. During the greater part of the year, however, wheeled transportation can be used throughout its entire extent.

The province has acquired a jet-well drilling outfit, and as a result of its use the more important towns are rapidly being supplied with good water for domestic purposes.

A primitive little hospital established by Dr. Vinluan, the district health officer, in which Army cots and other simple furnishings have been utilized, is doing great good at very small cost. The excellent service rendered by the one Filipino trained nurse employed by the institution, Miss Juana Villacorta, is such as to convince me more strongly than ever that the services of the young Filipino women who are being educated as nurses at the Philippine General Hospital, as well as at various private hospitals in the city of Manila, will be invaluable in the provincial towns. I think that the Legislature, at its next session, should seriously consider whether it can not and ought not materially to increase the funds available for the training of young women in this most important profession.

There has been no disorder of note in Nueva Vizcaya during the year, and conditions among the peculiarly wild and primitive Ilongot

and Negrito inhabitants steadily improve. Capt. Wilfrid Turnbull, Philippine Constabulary, who has charge of the work for the Ilongots and Negritos on the Pacific slope of the eastern mountain range of this province, has succeeded in establishing and holding together two flourishing Negrito villages, a thing which, so far as I am aware, has never before been done. Capt. Turnbull has lived with his Negritos and Ilongots throughout the year. Whether the villages which he has built up can be brought to such a state of development that they will not disintegrate if their inhabitants are not under the immediate control of a white man remains to be seen, but the results to date are certainly encouraging, and Capt. Turnbull is entitled to great credit for the self-sacrifice which has led him to devote himself with such singleness of purpose to the betterment of conditions among the simple peoples whom he serves.

THE MOUNTAIN PROVINCE.

In spite of the resignations of Gov. William F. Pack and Lieut. Gov. Jeff D. Gallman, the work of the Mountain Province has progressed steadily during the year.

At the provincial capital a large addition to the provincial building, affording much needed office and storage space, has been completed, as have a supervisor's house and a nurses' home. The water system has been extended, and sanitary plumbing has been installed. The town has been improved in various ways and is now an attractive place.

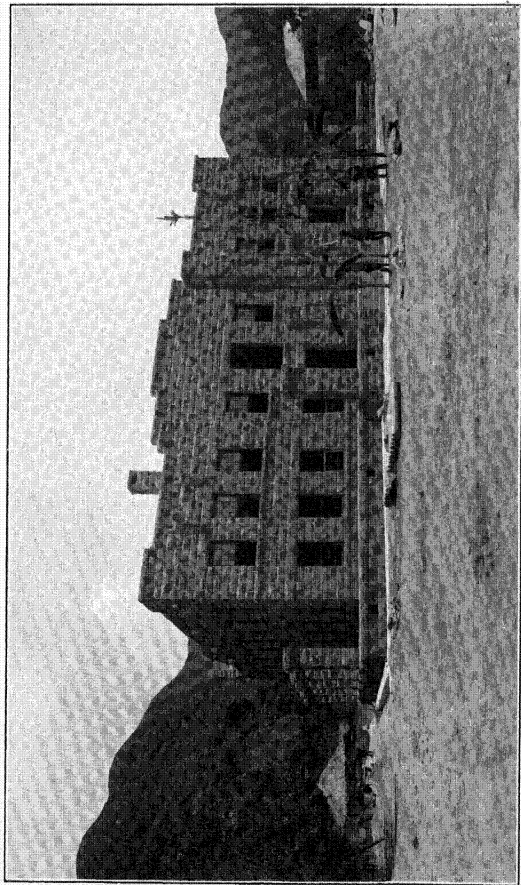
IFUGAO.

The resignation of Lieut. Gov. Jeff D. Gallman, followed by the appointment of Capt. O. A. Tomlinson, Philippine Constabulary, to the position thus left vacant, did not involve any serious interruption in the work of this subprovince. Capt. Tomlinson had previously served as its lieutenant governor during the absence of Lieut. Gov. Gallman on leave, was acquainted with all the Ifugao chiefs, and was thoroughly familiar with the details of the work.

A very large amount of public-improvement labor is available annually in Ifugao. A number of important irrigation ditches were constructed, and substantial additions to, and improvements in, the trail system were made. Of the latter the most noteworthy are the trail along the side of Santo Domingo Mountain, which saves the necessity for crossing its summit and thus makes it possible to avoid a large amount of heavy climbing, and the Mayoyao-Natonin Trail, which reduces the time required to make the horseback journey between these two places from five days to one.

The Ifugao schoolboys of Quiangan, the subprovincial capital, have added to the extraordinary record they had previously made in building a stone schoolhouse by nearly completing a splendid stone subprovincial office building. This structure would be an ornament to any city, and it is almost incredible that such urchins, aided only by a single foreman, should have erected it.

The spirit displayed by the Ifugaos during the year could not have been better, and the state of public order has been excellent throughout the subprovince.



A NEW SUBPROVINCIAL BUILDING AT QUIANGAN.

This building was not quite completed when photographed. All the work on it was done by Ifugao school boys, including splitting the stone, cutting it to dimensions, facing it, burning the lime, and mixing the mortar.



BONTOC.

Lieut. Gov. Samuel E. Kane has succeeded in bringing about better conditions in this subprovince than have ever previously existed there. The new buildings at the provincial capital, heretofore referred to, were constructed under his immediate supervision. Water and sewerage have been supplied to the more important buildings. A new structure has been erected for the accommodation of the provincial exchange, and one-fourth of the work upon a new market, where the people of each important settlement will find a home when they come in with their wares, has been completed.

The trail between Bontoc and Lubuagan, the capital of the subprovince of Kalinga, was the worst in the Mountain Province. Lubuagan is about 400 feet lower than is Bontoc, but in order to get there over the old trail one had to climb 18,000 feet and to descend 18,400. A line has been staked for a trail which will follow the Rio Chico Valley until a point immediately below Lubuagan is reached. The grade throughout this entire distance will be almost level. Approximately half of this trail has already been completed, and it will probably be finished during the coming year. It is in every way a most creditable piece of work and will decrease by about one-half the time needed comfortably to make the ride between the two towns.

Work on this trail has been delayed for years because it was necessary for it to pass through rice terraces of the Igorots on leaving Bontoc and they strenuously objected to this. The Igorots are superstitious about their rice fields, and it was not deemed right to disregard their wishes. Lieut. Gov. Kane, however, hit upon an admirable plan which worked to the satisfaction of all concerned. Below the town of Bontoc there was an extensive piece of rich agricultural ground of comparatively little value for growing rice, as the only way the Igorots had of getting water onto it was to build a dry stone dam across the Rio Chico. Whenever a heavy shower fell this dam would wash out. It was sometimes necessary to rebuild it as many as three or four times within a year, while if the washout occurred at a critical time the crop was lost before the dam could be rebuilt. Furthermore, the dam could not be made high enough to make it possible to place all of the ground in question under irrigation.

A new irrigation ditch was built from a point high up on the Rio Chico where an intake could be blasted out of solid rock. In order to construct this ditch it was necessary to tunnel through a number of bluffs. The Igorots were at first very positive that this could not be done, especially as tunneling was begun from the opposite sides of the largest bluff at one time. When the working parties got near enough to hear each other there was great excitement and when they finally came together the delight of these simple workmen knew no bounds. The men whose rice terraces would be interfered with by the new trail willingly accepted the much better land and surer water supply thus made available for them, and not only was all hard feeling avoided but the people of Bontoc sent a special delegation to call upon me upon the occasion of my annual inspection of that place and to express their very warm thanks for the assistance which had been rendered them.

Road and trail work has now progressed so far in the Mountain Province that it will be possible each year to do an increasing amount of irrigation ditch construction and to give more attention to the supplying of the towns with adequate supplies of sanitary water for domestic purposes. Such improvements are very highly appreciated by Igorots, Kalingas, and Ifugaos.

There have been several comparatively unimportant disturbances of public order during the year. A boy from Bontoc used his head ax on a boy from Tucucan for no apparent reason, cutting him severely. The Tucucan people at once armed themselves and attempted to raid the town of Bontoc. The Bontoc people, in accordance with the orders of the lieutenant governor, neither armed themselves nor left their homes. The Tucucan war party was intercepted in the outskirts of Bontoc by the lieutenant governor and a constabulary officer and its members were disarmed and sent about their business. As soon as they had had a chance to cool off they readily admitted that they indulged in hasty action.

While I was inspecting Bontoc a man of Malecon became insane, proceeded to Sadanga and killed an old woman of that place, without taking her head. He then returned to his own town and killed two men there. Meanwhile the Sadanga warriors seized their arms, followed him to Malecon, and encountering an innocent man with a bloody head ax killed him and took what is called the jawbone, which in effect means that they cut off the flesh of his face with the lower jaw attached to it.

As soon as news of this untoward occurrence reached Bontoc an Igorot policeman was sent to demand the return of the jawbone, which was effected, and the affair was adjusted without any fighting between the two towns.

A few years since either one of these incidents would have resulted in wholesale killing.

KALINGA.

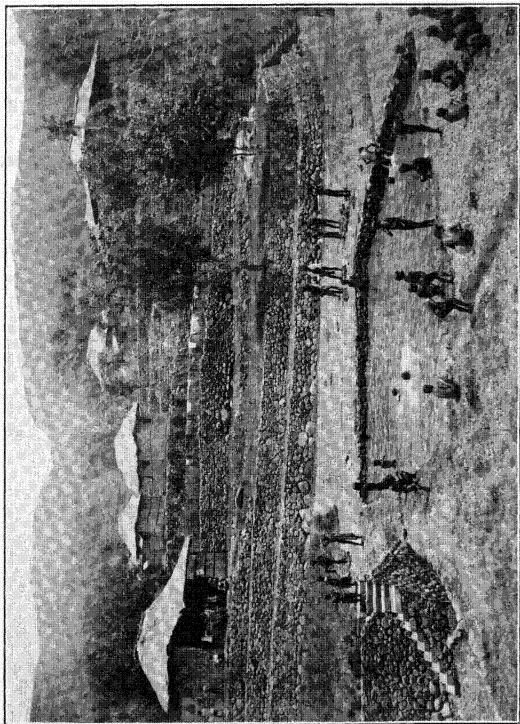
There has been no interruption in the work of this subprovince during the year and, thanks to the activity of its lieutenant governor, Walter F. Hale, who is now the oldest lieutenant governor in time of service in the Mountain Province, it has progressed steadily and rapidly.

The great stone swimming pool at Lubuagan, recently constructed, is highly appreciated by the people of that place. A new low-grade trail between Lubuagan and Bontoc has been completed to the subprovincial line, and other important road and trail work has been done.

The state of public order has remained excellent.

APAYAO.

As stated in many of my previous annual reports, the problem presented in this subprovince is proving more difficult than that existing in any other subdivision of the Mountain Province. Lieut. Gov. Conner has made substantial progress toward its solution during the year. Malcontents to the number of approximately 70, who have for a long time caused trouble in the immediate vicinity of the subprovincial capital, finally went on the warpath. With the active



LUBUAGAN SWIMMING POOL.

We are trying to teach the Igorots that cleanliness is next to godliness. This recently constructed swimming pool, some 10 feet in depth, is full of men and boys from daylight until dark.

and effective assistance of the Philippine Constabulary they were promptly dealt with, and conditions in Apayao are at present better than they have been for a long time. When I inspected the subprovince, Kalingas from its extreme southern portion came to see me in the town of Magapta on the Abulug River, a thing which has never occurred before, as the Kalingas have been afraid to enter this territory.

Material progress has been made in trail construction in Apayao and a little more work will establish communication between it and the subprovince of Kalinga so that one can ride a horse from Bontoc to Tauit. The time has come when the subprovincial capital should be moved to a more central point farther up the Abulug River. It was intended at the outset to occupy Tauit only temporarily, but untoward circumstances have delayed the carrying out of the plans originally made. I expect that Lieut. Gov. Conner will establish himself provisionally near the center of the subprovince in the near future.

A beginning has been made toward utilizing these people for maintaining law and order within their own territory, and it is hoped that a substantial advance will be made in this matter during the coming year.

LEPANTO.

The Cervantes-Mancayan Trail has been completed, and much work has been done on other trails under construction in this subprovince. Conditions as to peace and order have left little to be desired; but on the whole, progress has hardly been what might have been expected, owing in part to the fact that prior to the time when he indulged in the misconduct hereinbefore mentioned Lieut. Gov. W. A. Miller seemed to lose interest in the work of his subprovince.

AMBURAYAN.

The great masonry wall, designed to protect Tagudin, the capital of this subprovince, from the inroads of the Amburayan River, has been completed and the town, which has suffered severely in the past from water-borne diseases because its inhabitants obtained their drinking water from the Amburayan River, has been provided with two excellent artesian wells. A third is now being sunk, and if it is successful there will remain no excuse for sickness resulting from the drinking of infected water.

BENGUET.

Great progress has been made in grading that portion of the railway between Aringay and Baguio which lies within the subprovince of Benguet. The dirt work on this line is now 70 per cent completed. Throughout the rainy season the Igorots displayed an unanticipated willingness to work on the railroad grade, and, owing to the ingenuity of some of their headmen in the use of rain water, which was caught in basins and conducted to points where excavation was going on, were able to move large quantities of earth at a cost of approximately 5 centavos per cubic meter.

The Naguilian Trail has been widened, and in places surfaced, so that small automobiles can be used on it during the dry season with reasonable comfort and safety. A number of seven-passenger cars went over it, but it is not safe as yet for such heavy traffic.

The material prosperity of the pacific and industrious Igorots of this subprovince increases annually.

When Lieut. Gov. E. A. Eckman was promoted to the governorship of the Mountain Province the Benguet people displayed a very genuine regret, giving a fiesta in his honor at which they presented him with a token of their regard in the form of a gold watch and with a watch chain and cuff links made of gold mined in Benguet.

MINDORO.

I regret that I am unable to report any very material improvement in conditions in this province during the past year except the construction of a considerable amount of new trail on the line between the provincial capital and Abra de Ilog, and the sinking of a number of comparatively shallow driven wells which has resulted in securing adequate supplies of good drinking water in a number of towns where such supplies were sorely needed.

A modern sanitary market building has been erected at Calapan, the provincial capital. The sanitary condition of the towns of Naujan and Bulalacao has materially improved and is now excellent, but this improvement is perhaps more than counterbalanced by the backsliding of places like Pinamalayan and Caluya, in which disgraceful conditions have arisen. To my regret I have become fully convinced that even in those Filipino towns, where satisfactory conditions have finally been brought about as a result of years of painstaking work, the inhabitants are so little impressed with the resulting benefits that they immediately abandon all efforts to keep their towns clean the moment outside pressure is relaxed and would, if left to themselves, promptly return to the conditions from which they have been forced to emerge.

PALAWAN.

Late in the year Gov. John H. Evans of this province became ill with pulmonary tuberculosis. In the mountains of Benguet his condition improved so rapidly that he was soon fit to assume the duties of its lieutenant governor and it was deemed best to arrange an exchange of work between him and Lieut. Gov. H. J. Detrick, who was made acting governor of Palawan.

Mr. Carrigan, assistant to the governor for work among the Moros and Tagbanuas, went to the United States on leave and is not expected to return. His place is being filled by the detail of Lieut. William G. Carter of the Philippine Scouts.

In general it may be said that conditions on the east coast of the main island of Palawan and on the small islands adjacent thereto have very materially improved during the year, while on the west coast, which is comparatively unimportant, there has been material retrogression. The effort to improve the sanitary condition of the Filipino towns and settlements actively begun a year ago has met

with some success. Puerto Princesa and Cuyo are in excellent condition, while a number of other places, including Cagayancillo, have materially improved.

The Tagbanuas on the Aborlan Reservation progress rapidly and the number of families settled there increases. The industrial school operated by the bureau of education on this reservation is doing admirable work.

There has been no trouble among the Moros of Palawan proper, but there has been a serious outbreak among those of Balabac. Its history shows the difficulty of dealing with these people. An insignificant individual, who previously had had little influence, was detected in improper relations with the wife of one of the headmen. The latter attempted to kill him and, seriously wounded, he was forced to take to the hills. After an absence of several months he returned, stating that he had been met in the hills by little people about a foot high who had instructed him to establish a new religion. He proceeded to carry his alleged instructions into effect, gathering about him a considerable proportion of the male Moro inhabitants of Balabac and a limited number from Palawan. These people ultimately worked themselves into a frenzy and decided, among other things, to kill all Christians on the island. On July 23, 1913, the place of Mr. Loudon, on Delauan Bay, was attacked, and his infant child, his Filipino wife, and five other Filipinos were murdered.

In anticipation of possible active trouble, Lieut. Reid of the Philippine Scouts with 25 soldiers had been seasonably sent to Balabac. He left the Loudon house only about an hour before this attack. Immediately upon learning of it he went to the place where the fanatics had been holding their religious meetings and he and his men were promptly and vigorously attacked. Severe punishment was inflicted upon the fanatical Moros. An additional company of scouts was promptly sent from Jolo by Gen. Pershing and at this writing most of those concerned in the Dalauan Bay murders have been killed or apprehended. The remaining Moros of the island have with few exceptions lost faith in their new religion and have returned to their homes content to remain adherents of Islam, for the present at least.

At Aparauan I found that the Tagbanuas had been working for two years cutting timber for the holder of a forest concession who had never had a settlement with any of them during this period. They were supposed to be credited for their work at the rate of 16 centavos per cubic foot of timber cut. None of them knew enough to measure timber, and none of them had the slightest idea how much they had cut. All of them had received advances of rice, cloth, etc., from their employer at more or less frequent intervals. None of them knew how much they had received nor what amounts had been charged against them. In other words, they were absolutely in the hands of their employer and there was unquestionably grave reason for believing that he had no intention of dealing fairly with them. I caused his agent on the ground to be arrested and taken to the provincial capital for trial as a gambler and a user of false weights and measures.

The curse of the Province of Palawan is the lack of adequate transportation. Such conditions could not have arisen in a reasonably accessible place. The Island of Palawan is 230 nautical miles long, while the extent of the province from north to south is 360 nautical miles and from east to west 160 nautical miles. The main island lies

in such a position as practically to split both monsoons with the result that both its coasts are wind swept during the greater part of the year and navigation along them is unsafe, except in vessels of considerable size.

The provincial ketch, which has auxiliary engine power, was reasonably adequate to meet the needs of the province at the outset, but should now be constantly employed in supplying the several provincial exchanges with the goods required by the Tagbanuas and Moros and in taking the products purchased from these people to market. The only additional water transportation owned by the province is one rather small open launch. A good-sized vessel could be constantly and profitably employed in making trips around the province to gather freight and in taking it to the Kudat and Manila markets. The lack of such a vessel often renders it impossible to maintain communication with the west coast and retards the development of this naturally rich region.

An American who has been cutting timber at Alfonso III for two years has never been able to ship a stick of it. Recently he threw a considerable percentage of his cut into the sea in order to have it handy for loading, believing that a vessel was coming in the immediate future. Nearly three months have since elapsed, the teredos are perforating his timber, and there is no transportation in sight.

The schooner operated by Capt. Wallace, who is conducting an important lumber business on Malampaya Sound, turned turtle recently in a squall when near Manila. He did not even hear of the accident for weeks, and then only by chance.

In view of these facts and of the importance of supplying the Iwahig penal colony and the Balabac customhouse, I believe that the Legislature should seriously consider the advisability of utilizing a good-sized vessel to make the run from Manila to and around the Island of Palawan and back to Manila as frequently as possible. Such a vessel on a regular schedule would enormously facilitate the operations of the provincial officials and would greatly benefit the people of the province.

AGUSAN.

There has been no change among the more important officers of this province during the year and progress has been gratifyingly rapid and substantial. Sanitary conditions in many of the Manobo towns along the Agusan River have materially improved and in several instances now leave little to be desired. In only one case, that of Bunauan, has there been material retrogression. It followed the withdrawal and assignment to duty elsewhere of Sr. Blas Baclagan, a Filipino provincial employee, under whose supervision the place had been thoroughly cleaned. Conditions have also improved in each of the three Christian municipalities of the subprovince of Butuan.

At the provincial capital an excellent and adequate provincial building has been completed. Street and drainage facilities have been materially improved and increased. The town is rapidly becoming a suitable capital for a great province.

Reasonably satisfactory sanitary conditions have been maintained at Talacogon as the result of strong and constant pressure, while Cabadbaran, which was in a state of disgusting filth a year ago, is

to-day materially cleaner than the average Filipino town. The little hospital at Butuan conducted by Drs. Ampil and Garcia has done excellent work. The improvement in sanitary conditions in many of the Manobo towns is largely due to the intelligent activity of Dr. Ampil.

The business of the Manobo stores has practically doubled during the year and now amounts annually to some ₱80,000. These stores are perhaps the most important single civilizing influence at the disposal of the government of this province. It is impossible to keep them supplied, with the water transportation at present available, and more should be immediately provided.

Gov. Bryant and Capt. G. O. Fort of the Philippine Constabulary have, by their intelligent and capable handling of a difficult situation, ended a series of blood feuds which has existed for a very long time among the more warlike and less civilized Manobos, and through concerted action with the provincial authorities of Surigao have materially improved the condition of public order in the mountains along the boundary line between Surigao and Butuan.

A vicious attempt on the part of certain Filipinos to create new troubles among the primitive people of this region, who are only just now being brought under governmental control, has largely failed as the result of the timely and vigorous intervention of the Secretary of Finance and Justice and the Governor General made at my request. Shortly after peace had been established among these people by Govs. Bryant and Soriano there was an effort to bring criminal prosecution against a number of their chiefs because of crimes admittedly committed by them in the year 1901 at a time when no governmental control, either Spanish or American, had ever been established over the territory which they occupied. They were then being guided in their actions by their own tribal customs, which recognized as proper, and even commendatory, acts which more civilized peoples deem to be criminal. Thanks to the officials, above mentioned, legal proceedings were discontinued.

In dealing with the more warlike tribes of the Philippines, I have persistently followed the policy of ignoring criminal acts, if committed in accordance with tribal customs prior to the establishment of effective governmental control, and a departure from this course in the present instance would have been followed immediately by disastrous results.

The subprovince of Bukidnon has, as usual, been a storm center on account of the activities of a small vicious element of the population of the neighboring province of Misamis. Its Filipino lieutenant governor, Sr. Manuel Fortich, was made the subject of two rather ingenious attacks, the signatures of the complainant in each case being forged, and as a result the provincial governor was compelled to waste time in an investigation which proved to be entirely uncalled for.

On the complaint of the lieutenant governor one Anastacio Neri was prosecuted for having accepted money from a number of Bukidnon men with the understanding that he would pay their public improvement tax, or, at all events, that they would not be called upon to pay it, and then pocketing the money. Neri was acquitted by a justice of the peace. The judge of first instance concerned

has reprimanded this official, and more similar cases will now be brought against Neri.

As a result of this effort to protect his people, Lieut. Gov. Fortich was threatened with prosecution for murder because of the shooting of escaping assassins by constabulary soldiers under his orders in the year 1910, the plan being to get him into jail charged with an unbailable offense and keep him there as long as possible. This criminal project fell through.

My inspection of Bukidnon gave me very great pleasure. I found the neat, clean, prosperous villages surrounded by flourishing crops; the cultivated areas and the road and trail system materially extended; new villages springing up on the fertile prairies; the spirit of the people admirable. The only criticism which could be made of the work in this subprovince was that the people and the officials, in their anxiety to build more road and trail, had in some instances failed properly to maintain what had previously been constructed. Necessary steps were taken to avoid a repetition of this mistake in future.

RECOMMENDATIONS RELATIVE TO WORK FOR NONCHRISTIAN TRIBES.

For some years past I have felt inclined to make certain general recommendations relative to legislation needed in order that work for the non-Christian tribes may be carried on more effectively, but have refrained from doing so lest I expose myself to the charge of seeking to extend my powers or to lighten my burdens as Secretary of the Interior.

Upon the eve of my retirement I feel that I may say what it seems to me ought to be said without danger of having my motives misconstrued. It will, I trust, be remembered that my recommendations are based on experience gained during 18 years of residence in the Philippines, in the course of which I have been continually brought closely in contact with the more primitive peoples of the Archipelago. During 12 of these years I have exercised executive control over the affairs of all members of non-Christian tribes residing outside of the Moro Province.

As I have already said, the day has not yet arrived when the non-Christian peoples of the Philippines understand much about laws or governmental policies, but many of their leaders are very keen students of human nature and they understand men uncommonly well. Personal contact with them and the winning of their confidence and regard are essential to the effective exercise of control over them.

The powers conferred upon officers of the so-called special government provinces, which are inhabited largely by non-Christians, are necessarily arbitrary and are therefore liable to abuse. The immense majority of the more primitive peoples are completely illiterate, so can not write of their troubles. Many of them are excessively timid and will not so much as speak of what they deem to be injustices if not practically persuaded to do so. These things make personal inspection and investigation by the Secretary of the Interior imperatively necessary. It would be worse than futile to attempt to control and wisely to guide the progress of the wild men of the Philippines from an office chair in Manila. The thing is impossible.

This fact has been recognized by the legislative body of the islands, which has made it one of the official duties of the Secretary of the Interior to inspect each special government province, except the Moro Province, at least once during each fiscal year.

Inspections, if they are to be of real value, can not be pro forma. A reasonably thorough inspection of the Mountain Province and western Nueva Vizcaya alone involves a horseback ride of 500 to 700 miles and occupies at least six weeks. A materially longer period could be very profitably employed. In order to observe conditions in eastern Nueva Vizcaya, it is necessary to make a steamer trip to the east coast of Luzon and proceed inland. At least two weeks annually should be spent in this region. Two weeks is the minimum time which a really thorough inspection of the Province of Mindoro demands, and three weeks of steady travel is the minimum requirement for a real inspection of Palawan. Three weeks should be devoted to the subprovince of Bukidnon and a similar period to the subprovince of Butuan. There remain such provinces as North and South Ilocos, Oriental and Occidental Negros, Iloilo, Capiz, and Antique, each of which has a considerable non-Christian population and ought to be inspected annually.

Personally, I am not only deeply impressed with the importance of these inspection trips, on every one of which I learn important facts which would not have come to my knowledge had I remained in Manila, but I thoroughly enjoy them and have devoted to them every moment which could be spared from other duties, giving two to four months annually to this special work. I have, indeed, frequently subjected myself to adverse criticisms because of long-continued absences from Manila in the course of which important matters arose needing immediate action by the Secretary of the Interior. Yet, even so, I have visited the east coast of Luzon only twice in twelve years; have never given to an inspection of Mindoro, and seldom to an inspection of Palawan, the time which I felt to be necessary; have never even visited the important part of the subprovince of Bukidnon which lies west of the Cagayan River, and have also failed to visit a number of important places in Butuan which are comparatively accessible.

Approximately half of the population of the subprovince of Abra, which is a part of South Ilocos, is made up of people of the Tingian tribe, yet I have been able to inspect it but twice in twelve years and during this entire period I have never so much as set foot in the wild man's territory in Negros or Panay. Lack of the time materially necessary to make inspection of these regions possible is my only excuse. An official charged with the protection of the public health; the administration of the public lands, the friar lands, and the public forests; and the supervision of such work as is performed by the Bureau of Science and the Weather Bureau; and required to serve during 90 working days of each year as a member of the upper house of the Philippine Legislature can, in my opinion, not safely devote more time than I have given to the inspection of the wild man's territory and the investigation of conditions there.

The truth is that such territory ought to be inspected more frequently than once a year, and it should not be possible to forecast the date of such inspection with as much certainty as at present

exists. The knowledge that the secretary in charge was likely to drop in at any time would have a very stimulating effect on officials as well as on the people.

In my opinion, executive control of the affairs of the Moro Province should be given to the secretary who exercises similar control over the remainder of the non-Christian inhabitants of the Philippines. The Governor General never has had, and in the natural course of events never can have, time personally to observe what is going on throughout this great region, and I reaffirm my conviction that the successful exercise of executive control over peoples like those which inhabit the Moro Province is only possible to one who has accurate and thorough first-hand knowledge of conditions.

The policy pursued in dealing with the non-Christian inhabitants of these islands should be a fixed and definite policy, unchanging from year to year and persevered in until the wild man has become convinced by long experience that he will be helped and protected so long as he tries to do right and will be punished when he deliberately does wrong. Such a policy is rendered difficult when the attempt is made to carry it out under two executive officials, as is now being done.

In my opinion, the best solution of the difficulties above enumerated is to create the additional secretaryship which has been provided for by law and to assign to the new secretary executive control over the affairs of all non-Christian tribes of the Philippine Islands, leaving him free from other duties save those of a member of the upper house of the Legislature. These he should continue to exercise so long as other secretaries of departments serve in a similar capacity. It might, however, well be understood that his presence at Manila should not be deemed essential except when matters concerning the non-Christian tribes were under consideration. He would thus be left free to devote his entire time to bettering conditions among that eighth of the population of the Philippines, who most urgently need help and with whom substantial results are so readily obtained.

The secretary charged with this work should have at his immediate disposal a coast guard vessel, and his office should, as a rule, be in the saddle or on this boat. His office force might well be limited to one stenographer, who would accompany him, and to an assistant.

The secretary in charge of this work would be reasonably sure of continued tenure of office during such period as he obtained good results for the reason that the nature of his duties, involving as they would a good bit of hardship and some personal risk, no less than the attitude of the Filipino politicians and caciques toward efforts to help the non-Christians, would preclude the seeking of his position by mere politicians. On the other hand, a worthy appointee would find his compensation in an almost unparalleled opportunity to benefit his fellow men and in the warm gratitude of the people whom he served. Let there be no mistake about the fact that the wild people of the Philippines are genuinely appreciative of and grateful for all efforts for their benefit the nature of which comes within their comprehension.

I believe that the executive authority now exercised by the secretary of the interior should be so extended that appointments to offices in the special government provinces would be made by him subject only to approval by the Governor General. For such highly specialized work he should be allowed to select his own subordinates and his

disciplinary control over them would be greatly strengthened were he vested with the power of removal.

There should be a radical change in existing legislation relative to the expenditure of the so-called non-Christian inhabitants' fund set aside for the benefit of the non-Christian inhabitants of the regularly organized provinces. At present these funds are appropriated by provincial boards, subject to the approval of the secretary of the interior. While the boards of a limited number of provinces, including North and South Ilocos, Iloilo, and Ambos Camarines, have displayed some interest in expending these funds for the benefit of their non-Christian residents, the large majority of the provincial boards concerned either refuse or fail to take any action whatever, allowing their non-Christian inhabitants' fund to accumulate in the hope that they may some day be able to divert them to purposes other than those for which they are set aside. There does not exist any authority to compel them to act at all, and the purpose of the legislative body in setting aside these funds is being successfully obstructed.

The following table shows the records of the several provinces concerned:

Statement of non-Christian inhabitants' fund from beginning of funds (1906) to June 30, 1913.

Provinces.	Receipts.	Expenditures.	Balance June 30, 1913.
Albay.....	P1,241.38		P1,241.38
Ambos Camarines.....	8,256.00	P7,564.08	692.52
Antique.....	4,162.67		4,162.67
Bataan.....	2,310.31		2,310.31
Bulacan.....	577.48		577.48
Cagayan.....	6,172.98	6,172.98	
Capiz.....	7,833.59		7,833.59
Ilocos Norte.....	3,617.61	3,456.93	160.68
Ilocos Sur.....	46,208.81	30,576.15	15,632.66
Iloilo.....	8,882.83	4,605.32	4,277.51
Isabela.....	3,643.21	701.45	2,941.76
La Union.....	3,780.04	3,780.04	
Misamis.....	6,843.69	6,843.69	
Nueva Ecija.....	1,635.78	50.00	1,585.78
Occidental Negros.....	6,571.59		6,571.59
Oriental Negros.....	23,660.34	9,522.00	14,138.34
Pampanga.....	1,528.05	130.65	1,397.40
Pangasinan.....	4,712.01	2,307.37	2,404.64
Rizal.....	3,369.15		3,369.15
Samar.....	1,788.67	489.85	1,298.82
Sorsogon.....	57.13		57.13
Surigao.....	4,140.27	4,140.27	
Tarlac.....	2,271.28	1,066.33	1,204.95
Tayabas.....	3,900.77		3,900.77
Zambales.....	4,514.06	3,393.00	1,121.06
Total.....	161,677.20	84,800.11	76,877.19

As emergencies may arise simultaneously in widely separated parts of the territory inhabited by non-Christians, and as the death, resignation, or removal of governors and lieutenant governors of special government provinces will from time to time create urgent necessity for the immediate appointment of experienced persons to positions of great responsibility, there should be provided an assistant to the secretary having in charge work for the non-Christian tribes who should be given opportunity thoroughly to familiarize himself with conditions in the several provinces and should be available at any time to take over the duties of a governorship or lieutenant governorship, thus

avoiding to some extent the possibility of the occurrence of a vacancy in an important post with no well-informed and well-trained man immediately available for appointment thereto.

In view of the frequency and the ingenuity of the efforts unlawfully to deprive members of non-Christian tribes of their liberty or of their property, there should be in the office of the attorney general a lawyer subject to assignment, upon request of the secretary having in charge the work for the non-Christian tribes, for the defense of members of such tribes who were too ignorant or too poverty-stricken to protect themselves when unjustly subjected to criminal prosecution, and to assist in saving real and personal property of those who were being unlawfully deprived of the one or the other.

Were the changes above recommended made, the very important work of safeguarding the interests and stimulating the progress in civilization and material prosperity of these wards of the United States would be placed upon a much more satisfactory basis than at present and its ultimate success would be practically assured.

BUREAU OF HEALTH.

The work of the bureau of health has been more successful during the past year than in any previous year since the American occupation. No serious epidemic of disease has occurred in any part of the Archipelago, and health conditions throughout the islands have been relatively excellent.

LOW DEATH RATE AMONG GOVERNMENT EMPLOYEES.

The death rate among Government employees has been brought down to the extraordinarily low figure of 3.09 per thousand. The rate among Americans was 2.49 per thousand; that among Filipinos 3.33. After making all reasonable allowance for the small number of very old people in the service, for the lack of children, and for the fact that most officers and employees are subjected to a physical examination before appointment, the result is extraordinary and conclusively shows that popular beliefs as to the deleterious effects of a tropical climate on persons of the white race are greatly in error. If one has due regard for certain well-known principles of right living, one's prospect of remaining free from dangerous disease is greater in Manila to-day than in many of the most sanitary cities of the United States. It should be remembered that the death rate above given covers the Government service throughout the islands, and is not limited to those employees who reside at Manila.

HEALTH A PURCHASABLE COMMODITY.

It has been conclusively demonstrated that in the Tropics health is, within reasonable limits, a purchasable commodity. There is a definite relationship between the installation of artesian wells and the death rate. The routine use of quinine among the inmates of the Iwahig penal colony and the removal of mosquito-breeding places has shown that people living in a country where pernicious malaria infection prevails may be made, on the average, as healthy as the residents of New York. The absence of a single death from smallpox

in Manila during the past three years demonstrates what can be done toward checking the spread of this pest. The sanitary improvement of the houses of the poor, and of the ground upon which they stand, produces definite results. With a proper organization there is a definite relationship between the expenditure of funds and the resulting decrease in the death rate. In these islands the per capita cost of sanitary improvements has been extraordinarily low.

PUBLICITY WORK.

Owing to the ignorance of the general population, great importance here attaches to the distribution of simple information relative to the causes and the prevention of disease. The absence of epidemics during the year has left the bureau free to do more than usual in this regard. A number of valuable pamphlets, couched in simple language and dealing with such subjects as "Philippine Habitations," "Insects and Disease," "Poisonous Fishes of the Philippines," and "Beriberi and How to Prevent It," have been scattered among the people and are being used with good effect as texts in the public schools. There has also been issued a circular of information concerning the Philippine General Hospital. Many popular health articles have been prepared for the public press and through this agency have been given wide circulation. A sanitary inspector's handbook is soon to appear.

TREATMENT OF LEPROSY.

Continued success has been obtained in the treatment of leprosy with chaulmoogra oil. Two cases which have remained free from the disease for more than two years each have been discharged, while a number of others have been free from leprosy for 22 months and will be discharged at the end of two months if the disease does not reappear.

In order that too great hopes may not be aroused by these apparent cures, it should be remembered that in the experience of the bureau one leper has apparently recovered spontaneously and that for a period of more than a year there have been some 20 patients under similar treatment to that mentioned above of whom but a few have shown any signs of improvement.

REGULATION OF MANILA DANCE HALLS.

An ordinance for the regulation of Manila dance halls, drafted by the bureau of health and approved by me, has been adopted by the municipal board. The necessity for such an ordinance to prevent the spread of dangerous communicable diseases, in which the dance halls were an important factor, was undoubted among those familiar with the facts. The plain truth is that these resorts, which have masqueraded as harmless popular amusement halls, were places of gross immorality which played so important a part in their economy that the enforcement of this sanitary ordinance has practically abolished them—a result on which the municipal board and bureau of health have been congratulated by every decent element in the community, although both were viciously attacked by the baser element and by those financially interested in these sinks of iniquity.

LANTERN EXHIBITIONS.

Lantern exhibitions have been employed to disseminate among the masses useful information of a hygienic and sanitary nature. A large number of slides and a suitable text were prepared by the more experienced medical officers of the bureau. The text was translated into the several important native dialects and a competent man was detailed to give illustrated lectures in Manila and in the provinces. These lectures have proved very popular. I know of no equally effective means of interesting the masses, and believe that the system should be greatly extended.

SANITARY IMPROVEMENT OF ILOILO.

Sanitary conditions at Iloilo, the second city in commercial importance in the Philippines, have been continuously bad. That place has a municipal government with elective officials. Every effort to have its municipal council enact a suitable sanitary ordinance had failed. The apathy of the local officials blocked all attempts to effect sanitary reform.

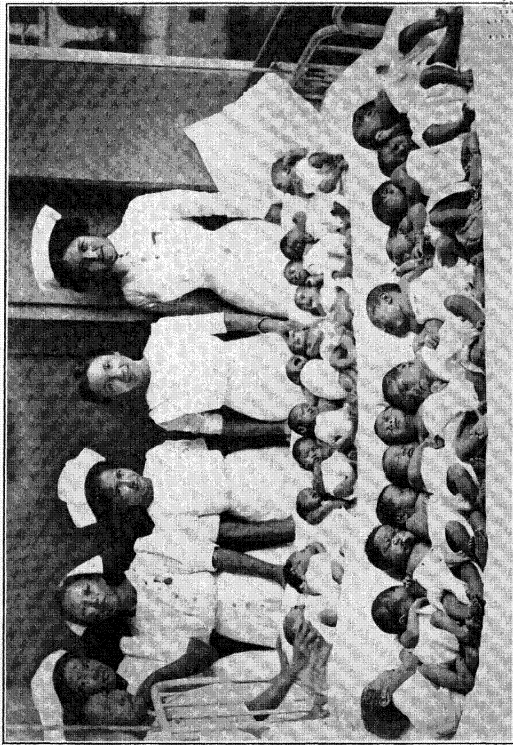
The outbreak of bubonic plague gave opportunity for introducing sanitary measures which could not, under ordinary conditions, have been put into effect. The council was at last induced to pass a sanitary code and the hearty cooperation of many of the local officials in its enforcement was secured. District Health Officer Cullen was transferred to Iloilo from Samar and has brought about many important sanitary reforms. Lowlands are being filled or drained; venereal disease, which was rampant, is being brought under control; the occupation of basement rooms in buildings on lowlands is being gradually stopped; a system of street cleaning and garbage disposal has been introduced. Lack of funds seems now to be the chief obstacle in the way of putting the city into the best sanitary condition. The attitude of the provincial governor, Hon. Adriano Hernandez, toward sanitary work is especially appreciated by the director of health and by me. Present indications are that he will see enormous sanitary improvements in his provincial capital during his term of office; indeed, the improvement already accomplished is very great.

THE MANILA MILK SUPPLY.

Owing to causes enumerated in previous reports, the Manila milk supply continues very unsatisfactory. The last Legislature made an appropriation for the Society for the Protection of Infants providing for the construction of a building to house the sterilizing outfit donated by Mr. Nathan Straus, of New York, at the same time imposing conditions which render it possible for the director of health to require and secure the sterilization there of all milk offered for sale in Manila. Important results will surely follow the carrying out of this reform.

THE SOUTHERN ISLANDS HOSPITAL.

The last Legislature made appropriation for opening this important institution, which had stood for more than a year with closed doors although ready for use. It is steadily growing in popularity,



SAVING THE BABIES.

A photograph taken in the ward for native women in the Philippine General Hospital.

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and has already accomplished great good. Its chief operating-room nurse is a young Filipino woman educated at the Philippine Training School for Nurses. She is rendering most excellent service.

IMPROVEMENT IN THE MANILA FREE OBSTETRICAL SERVICE.

As properly trained Filipino nurses have become available they have been substituted for the midwives heretofore employed by the bureau to render free obstetrical service in Manila. That city now appropriates ₱7,000 toward the cost of this service. The patients are being handled in the free beds of the Philippine General Hospital and a large part of the expense involved will hereafter fall upon the bureau of health. The service constantly increases in popularity and is invaluable both because of the resultant saving of the lives of mothers and infants and because of the real education experienced by ignorant mothers who are given perfect care.

FOOD AND DRUGS INSPECTION.

On December 1, 1912, the practice of relabeling misbranded articles offered for import at the customhouse was discontinued except in the case of foods and drugs offered for importation for the first time. The food and drugs act has now been in force for six years and sufficient time has been afforded importers to have their goods meet the requirements of the law unless they are importing new brands.

Rules have been adopted which insure purity and good quality in the ice cream sold locally and in the coffee put up in the Philippines. Previously there was a mixture sold as coffee which contained no coffee at all.

The examination of drugs put up by local pharmacists showed that in many cases tablets and capsules contain less of some important ingredient than the label called for. Conditions of this sort, which might cost valuable human lives, are especially reprehensible. A number of cases were prosecuted and convictions were secured. I was asked to intervene on the ground that the short weights were the result of the carelessness of incompetent employees rather than of deliberate intention on the part of owners of pharmacies. I refused to do this, holding that the owners were responsible for their subordinates.

There seems to be a growing appreciation by importers of the efforts of the bureau to secure pure-food products and correct labeling. Importers now confer freely with the bureau, requesting information and instruction.

RICE POLISHINGS OR TIQUI TIQUI.

Because of its value as a remedial agency in the treatment of beriberi, experiments have been made to determine whether tiqui tiqui as produced at the rice mills could be utilized as a food product for general human consumption. The difficulties in the way of making it into a palatable food were found to be not readily surmountable. Experiments are now being made with yeast as a food, as it seems to produce results similar to those obtained with tiqui tiqui.

THE SCHOOL-LUNCH SYSTEM.

A large percentage of the people of the Philippines are underfed because of the character of their diet. This is especially true of school children, many of whom stay through a long morning session without having had any breakfast. There has been established a comprehensive lunch system in the Manila city schools as a result of which nutritious lunches are furnished at an absurdly low cost to all who care for them. For 4 centavos (practically 2 cents gold) a pupil can obtain a bowl of hot, nourishing soup or stew, a buttered sandwich, a piece of cake, and a glass of ice cream or an ice.

At the Tondo Intermediate School the articles sold are grouped under the following heads: Fritters, ices, tarts, cookies, pies, hot biscuits, soups and stews, sandwiches, cakes, muffins, and miscellaneous, the latter designation covering doughnuts, chicken pie, deviled crabs, cheese straws, fried salmon and bread, baked potato and salmon, johnny cake, Washington pie, and macaroni and cheese, while from two to five different articles are furnished under each of the other heads, so that the tastes of all may be suited. The most expensive item on this list costs but 5 centavos (2½ cents gold) and even then a small profit is made, as all the work of preparing and cooking the food, washing the dishes, etc., is done by pupils under the supervision of teachers. The pupils are thus taught to prepare wholesome and nourishing food in a strictly sanitary way and at the same time learn how very inexpensively they may live well. A medical inspector formerly detailed to the city schools states that a year after this lunch system was established the health of the pupils had improved 90 per cent. It should not be understood that the bureau of health takes credit for this admirable lunch system originated by the bureau of education. I mention it as a matter vitally influencing the health of school children.

INSTRUCTION OF SANITARY INSPECTORS FOR WILD TRIBES.

A small class of Ifugao, Bontoc, and Kalinga young men has been started at the Bontoc Hospital, where its members will undergo a short apprenticeship as hospital helpers and will receive instruction in elementary sanitation and in the use of a few simple remedies. Their services will be invaluable upon their return to their towns.

We have in the Mountain Province but two physicians regularly employed to meet the medical and surgical needs of some 400,000 wild people. There is no greater opportunity for real missionary work than that afforded by the needs of these simple people, and the way for such work has now been prepared.

AMBULANCE SERVICE.

All ambulance work of the bureau of health is now done with motor cars, of which there are five. Four of these are driven by electricity. The other is a high-power gasoline ambulance of wide radius which can be sent into the provinces. It can make a speed of 60 miles an hour and will climb any road grade. It is really a small hospital on wheels, having a lavatory, water-sterilizing apparatus, formaldehyde

disinfector, surgical instruments, upper and lower berths, table, etc. With the large and constantly increasing mileage of good automobile roads extending out from Manila this motor-operating room makes it possible quickly and effectively to meet serious conditions when patients living at a distance can not be removed to the hospital.

INJUNCTION AGAINST THE DIRECTOR OF HEALTH DISSOLVED.

One of the most important events of the year has been the dissolution of the injunction against the director of health restraining him from ordering persons in Manila to connect their premises with the new sanitary sewer system of the city. The question involved is that of the power of the city of Manila through the director of health to compel its citizens to use a modern sewer system which has cost the taxpayers more than ₱4,000,000 and was installed for the express purpose of improving health conditions. The final satisfactory outcome of this matter removes one of the most serious difficulties in the way of making Manila a thoroughly sanitary city.

INCREASED USE OF MILK.

Not only has progress been made in establishing modern sanitary dairies to furnish fresh milk to the residents of Manila, but the importations of tinned natural milk show a steady increase. This is a most helpful sign.

ANTIMOSQUITO WORK.

The results of antimosquito work in Manila have been very satisfactory. As previously noted, the extraordinarily low water caused by the drought of 1912 caused extensive areas along the Pasig River to be flooded by the sea at high tide, and led to a temporary enormous increase in mosquitoes of a species which breeds only in brackish water. With the disappearance of these unusual conditions at the beginning of the heavy rains, the number of mosquitoes rapidly diminished and it is now exceptional to find one in many parts of the city where they used to swarm.

STERILIZED WATER FOR PUBLIC EATING PLACES.

It has been found difficult to compel the keepers of small shops where food is sold to serve distilled water which has been kept free from harmful germs after distillation. As is usually the case, a simple remedy has been found to be the satisfactory one. Such places are now required to keep at least two large teakettles and to sterilize the city water by thoroughly boiling it. The kettles are kept closed except when being filled or cleaned. One is in use for sterilization while water is being served from the other.

MANILA PUBLIC MARKETS.

The city ordinances now provide that fresh meat, fish, poultry, and green stuffs intended for food may be sold only in public markets, thus making effective inspection and supervision practicable. This is one of the most advanced pieces of legislation yet enacted by

any city, and its enforcement is proving of great value in bettering health conditions.

Two new modern markets of reinforced concrete have been opened. Even the tables are of concrete and the buildings have water facilities which make it readily possible to keep them scrupulously clean. Forks are provided in the meat stalls to prevent the handling of meats. Substantial screen cages protect meats from flies before sale.

MARKETS IN THE PROVINCES.

The executive bureau has adopted the policy of financing the construction of modern sanitary markets in many provincial towns by authorizing loans for this purpose from the gold-standard fund. The public market in a Filipino village is the most important social center of the place, and its maintenance in a sanitary condition is essential if the public health is to be protected. Formerly such structures were usually badly built of bamboo or wood, floorless, and with thatched roofs. The new markets have floors of concrete and roofs of galvanized iron or tile. This investment of gold-standard funds is very safe, as the buildings are fireproof, while the profits derived from them begin promptly and are large. The erection of such buildings tends to stimulate the civic pride of the townspeople.

CONDITIONS IN BUTUAN AND BUKIDNON.

During the year substantial progress has been made in improving sanitary conditions in these two subprovinces of the Province of Agusan. The personnel has been increased by sending Dr. Garcia to the Butuan Hospital and by adding Mr. Manuel Paras, a graduate of the Philippine Training School for Nurses, to the working force. This leaves Dr. Ampil, the district health officer, free to do more work in the Christian municipalities and in the settlements of the wild people than has previously been possible.

Plans are completed for the construction of a modern concrete hospital at Butuan.

SIBUL SPRINGS.

Very numerous complaints have been received relative to sanitary conditions at Sibul Springs. The public seems to believe that the control of the government reservation at this important health resort is vested in the bureau of health because its representative sells bath tickets, which in reality he is allowed to do only because there is no one else available for this work.

The management of the Sibul Springs is in charge of the Sibul Springs Improvement Committee, and the way in which the work has been done, or rather left undone, is a strong argument against again turning such an undertaking over to a committee instead of intrusting it to competent, responsible, salaried employees.

SIMPLE REMEDIES PACKAGES.

Packages of simple remedies of three sizes, sent out by the bureau of health, steadily grow in popularity with the public. Their distribution has made it possible to destroy the stocks of dangerous

drugs, formerly kept by municipalities, without creating too much ill will. The presence of stocks of these drugs in remote places, where there were no physicians to use them, was a menace to the public health.

USE OF DISTILLED WATER IN MANILA DISCONTINUED.

Artesian water of such excellent quality has been secured in Manila that it has been possible to discontinue there the use of distilled water. There was some reason to believe that the drinking of distilled water, continued during many years, was resulting in injury to the health of some of the users. At all events, artesian well water is an agreeable substitute for the distilled article.

THE ANTIPOLLO PILGRIMAGE.

At a certain season of the year people in great numbers visit the shrine of "Nuestra Señora de la Paz y Buen Viaje" at Antipollo. The pilgrims frequently number 10,000 or more per day. The town is not provided with adequate sanitary facilities and the efforts of the bureau of health to have this condition remedied have not as yet resulted successfully. The opportunity for spreading communicable diseases afforded by gatherings of this sort is almost unlimited, and unless the conditions which prevail at Antipollo are remedied the people of the archipelago will sooner or later pay a heavy penalty for their present and past indifference.

NEW METHOD OF COLLECTING GARBAGE AND REFUSE.

A private firm has made a contract with the city to remove its garbage and refuse by means of motor trucks. It purposes to utilize the city waste for profit in a modern plant and to collect it quickly and noiselessly, thus decreasing the probability of annoyance to the public.

Efforts have been made in the past to require property holders to provide themselves with galvanized-iron garbage receptacles, but have proved futile, as those who were willing to incur the necessary expense promptly lost their cans through theft, which the municipal police were unable to prevent. Furthermore, the galvanized-iron tanks soon became injured so that their covers no longer fitted tightly. At present the majority of property owners put their refuse and garbage out in barrels, boxes, and baskets. These are upset by hungry, prowling dogs, and the streets are thus littered with dangerous refuse, which furnishes abundant food for rats. The city is soon to furnish tightly closing wooden receptacles of a type which has been thoroughly tested and found satisfactory, charging a rental of ₱3 per year for each, and replacing any which are injured or stolen. This should greatly facilitate the antirat campaign.

THE FILLING OF LOWLANDS WITH STREET SWEEPINGS.

The undesirability of using street sweepings for filling lowlands is fully appreciated, but with the immense swampy areas which still remain and the very limited funds available for filling them it has been found expedient to allow the use of street sweepings, which is

unobjectionable if they are promptly covered with a minimum of 20 centimeters of clean earth or sand.

Large tracts of desirable, well-drained land have already been produced in this way, where formerly there were stagnant pools of filthy water.

DUTIES OF THE BUREAU OF HEALTH.

The duties assigned to the bureau of health include not only those usually imposed on similar organizations in the United States, such as the collection and compilation of vital statistics and the protection of the public from dangerous communicable diseases, but also embrace the distribution of certain public charity funds; care of the insane; supervision of the care of orphans and of the aged; supervision of general and special hospitals; the hygienic and medical care of more than 12,000 civilian employees; the administration of the food and drugs act; the duties of coroner's physician; the making of physical examinations of all candidates for the public service; the work of police surgeon; the enforcing of plumbing and building ordinances; investigation of water supplies; passing upon the analyses of all artesian well waters before their use is permitted; and many other matters.

HOSPITAL ADMINISTRATION.

The wisdom of having all government hospitals administered from one central office is frequently illustrated by the advantages and economies resulting from the standardization of supplies, the transfer of personnel from one hospital to another to meet temporary emergency conditions, the training and discipline of the entire force of employees, and that of the laborers, at first unskilled, who are necessarily employed in large numbers.

REGULATIONS FOR THE PHILIPPINE GENERAL HOSPITAL.

The Philippine General Hospital is a great and constantly growing institution. It serves representatives from every walk in life from the highest to the lowest, and people of almost every nationality there seek relief. The framing of adequate rules and regulations for its control has been a serious task, and much experience was necessary before the work could be completed. Regulations which clearly set forth the privileges of patients, as well as the duties of officers and employees, have now been printed, as has a circular of information regarding the hospital, which is a great convenience for its patients.

THE RELATIONSHIP BETWEEN THE PHILIPPINE GENERAL HOSPITAL AND THE COLLEGE OF MEDICINE AND SURGERY OF THE UNIVERSITY OF THE PHILIPPINES.

In my last annual report I set forth at some length the plan which I originated, and which was ultimately carried out, for the establishment of a great general hospital, a thoroughly modern college of medicine and surgery, and a great institution for scientific research

and the making of routine biological, chemical, and other scientific investigations.

In accordance with this plan, cooperation between the officers and employees of each of these institutions was provided for, to the end that a maximum of efficiency and economy may be obtained. So far as concerns the relationship between the hospital and the bureau of science, the arrangement has worked very satisfactorily. I regret to say that a similar statement can not be made concerning the relationship between the hospital and the college of medicine and surgery.

The college is under the control of the board of regents of the university of the Philippines, of which the secretary of the interior is a member. The hospital is under the control of the secretary of the interior.

Realizing to the full the fundamental importance of clinical teaching to the medical students, I caused every facility which this great hospital affords to be placed freely at the disposal of the college. I was under no lawful obligations to do this. It was in the first instance a strictly voluntary act.

As a result, admission to 200 free beds is now controlled by the faculty of the college, who are responsible for the medical and surgical treatment of the patients which fill them. Patients occupying these and all other free beds are admitted subject to the condition that they will allow their cases to be studied by the faculty and students of the college. Students, as well as members of the faculty, are given access to other than charity cases if of special interest when the patients concerned are willing to aid science by allowing this. Medical students and recent graduates are given hospital appointments, which afford them admirable opportunity for practical work.

Under provisions of existing law enacted in order to secure for the hospital the services of the best physicians and surgeons employed by the government, of assuring cooperation between the three institutions above mentioned, and of obtaining a maximum of efficiency at a minimum cost, the secretary of the interior is authorized to require any physician in the employ of the government to render service at the hospital, subject to the approval of the proper secretary of the department or of the board of regents, as the case may be. With the approval of the latter body I have required several American professors and assistant professors in the university to serve as chiefs of departments of the hospital or in other capacities. Under the terms of their university appointments these officers are authorized privately to practice their professions in the hospital for gain. They are furthermore allowed to make free use of operating rooms, surgical and other instruments and equipment, and of the excellent facilities for the treatment of patients afforded by the wards and private rooms. When I say that the use of these facilities is free, I mean that no charge is imposed on them for it. Their patients pay to the hospital the same charges as would any other pay patient. These men also use hospital offices for their private office practice. Not only are such privileges very valuable, but the men themselves are receiving salaries running up as high as ₱8,000 and ₱10,000 per year and are under obligation to give full time to the work of the government.

Incredible as it may seem, they object to furnishing officers and employees of the government the medical and surgical treatment to which the latter are lawfully entitled as a part of their compensation. Not only is this the case, but the suggestion has been made in the past that work for government officers and employees be turned over to their assistants, most of whom are young Filipinos in progress of gaining a medical education!

A further complaint, having its origin in the same underlying cause, is that these regularly appointed members of the hospital staff are required to treat outside patients who do not ask for the private services of any special physician or surgeon, and are therefore entered as general hospital patients and pay their fees to the institution instead of to individual practitioners.

The explanation of both complaints is that the men in question are so absorbed in money-making that they forget the priceless privileges afforded their college by the hospital, which are indeed practically unrivalled elsewhere; forget the extraordinary personal advantages which they themselves enjoy by virtue of their hospital positions; forget that the government is paying them liberally for full time; forget that they are enjoying a very special and exceptional privilege, not only in being allowed to engage in private business, but in being allowed to utilize government property and quarters to conduct it. They wish to escape the performance of work for which the government which employs them is compelled to provide, so that government officers and employees, as well as persons who enter as general hospital patients, may be compelled to employ them privately and to pay them for their services.

This would be the inevitable result of acceding to their wishes if they were allowed to retain their hospital positions, as there would then be no other competent government employees available in the hospital to treat the above-mentioned two classes of patients. The only apparent way out of the difficulty, should the board of regents see fit to exercise its undoubted power to free them from any obligation to serve the hospital, would be promptly to terminate their hospital appointments and to employ other physicians and surgeons to do the general hospital work which they now perform.

Their attitude is the more inexcusable because the present method of conducting the hospital results in very heavy expense to the government which could be avoided if the training of medical students and young medical graduates at the hospital were abolished. In that event the saving in efficiency and in the avoidance of interruption to work would be such that the director of health would gladly undertake to provide for the treatment of the present number of patients and for the maintenance of the present standard of efficiency without any increase in his appropriation.

In my opinion, any request on the part of officers of the College of Medicine and Surgery who are members of the hospital staff to be relieved of work for government patients or for general hospital patients should be emphatically denied.

The immediate result of granting it would be that so far as concerns government employees, they would in practice be for the time compelled to become the private patients of these members of the faculty of the College of Medicine and Surgery, and to

pay such charges as the latter might see fit to impose. In other words, until such time as the director of health could secure competent men to replace them, work for which he is by law required to provide would be crippled as the direct result of his willingness to help the college and his desire to save needless expense by utilizing the services of members of its faculty.

In this connection I must call attention to the fact that the charges which have sometimes been imposed on private patients by certain of the university members of the present hospital staff have provoked bitter complaints, which have been forwarded to me. I have ruled that I was without authority to deal with the matter.

It may be worth while to call attention to the further fact that in the past there has existed an understanding among leading physicians and surgeons of Manila for the purpose of controlling charges. It is no part of the duty of the director of health personally to give medical or surgical attention to government officers or employees, but the present director of health has throughout his official career given a very large amount of professional assistance to such persons without money and without price. One of the leading surgeons of the city called upon him and warned him that he must discontinue this practice or the "combination" would break him. The combination was advised to do its worst, but fortunately could not make its threat good, although the director of health was thereafter persistently and insidiously attacked.

The arrangement under which private individuals may become patients of the hospital and pay that institution for the services of its staff allows the director of health to exercise direct intervention in the matter of fees and affords the public protection. The interest of the public is entitled to consideration in a Philippine General Hospital, whatever might be the case in a university hospital.

I have found a simple if somewhat radical cure for similar evils resulting in the desire of certain officers of the bureau of health to practice their profession for private gain, and have now adopted a fixed rule that no officer or employee of that bureau shall be allowed to practice privately in the Philippine General Hospital. A similar rule applied by the board of regents to the members of the faculty of the College of Medicine and Surgery who serve on the staff of the hospital would, in my opinion, be in the public interest, and I am firmly of the opinion that it ought at least to be enforced in all cases of new appointees.

Before closing this discussion I must add that there have been repeated instances of disloyalty on the part of members of the college faculty toward the general hospital; that there has been a long-continued effort to oust the director of health and his subordinates from the control of the institution and to transfer such control to the faculty of the college; and that there has resulted endless annoyance to the director of health and to the Secretary of the interior, as well as serious interference with the efficient conduct of the institution. Such conditions can not be tolerated indefinitely, and if the mild methods which have thus far been employed in meeting them prove ineffective a very different procedure must be employed.

Members of the faculty of the College of Medicine and Surgery who are allowed to engage in private business by practicing their

professions in that institution, who are permitted in doing this to use government offices and government property, and are not willing uncomplainingly to devote reasonable time to such medical and surgical work of the government as may be requested of them in the interest of economy and efficiency, should be considered ineligible to hold positions on the hospital staff, and should be allowed to use the facilities of the institution only under conditions identical with those which attend its use by any reputable private physician or surgeon.

The task of providing for the government work by employing at adequate salaries competent men willing to devote all of their time to the government service in the hospital and to forego entirely the privilege of private practice would devolve upon the director of health. He would, I am sure, be found quite undismayed at the prospect.

It is fortunate for the progress of medical science that there are many highly competent physicians and surgeons in the world to whom the opportunities afforded by staff positions in such an institution as this appeal more than does the pursuit of the elusive dollar.

This arrangement would have one decided advantage in that it would increase the number of high-grade physicians and surgeons residing at Manila, while the opportunities afforded the public of obtaining treatment by the staff of the general hospital at reasonable cost would tend to keep the fees charged by private physicians and surgeons within reasonable limits.

The happiest solution of all would be for the members of the college faculty who serve on the hospital staff cheerfully to perform the duties imposed upon them and earnestly to cooperate in the carrying out of a plan the breadth of which ought to appeal to all scientific men—a plan which has met with the emphatic approval of many of the men best qualified by thorough professional training, long experience, and wide opportunities for observation to pass upon it.

PUBLIC LAUNDRIES.

The necessity for public laundries is one which has been frequently discussed but never before acted upon. It is a pleasure to report that one such institution has now been completed in the Sampaloc district and is open for use. Others will be built in the near future.

ARTESIAN WELLS.

One hundred and nineteen successful wells have been bored during the year. The construction of these wells, which yield abundant supplies of healthful drinking water, is a matter of fundamental sanitary importance and should be pushed as rapidly as funds will permit.

THE PHILIPPINE TRAINING SCHOOL FOR NURSES.

It has finally been decided to fix the length of the training-school course for nurses at three years, with an additional six months post-graduate course for those who may desire it. The graduates of this school are extremely well trained and the demand for them far

exceeds the supply. In order to meet this condition numerous graduates from other schools not so well equipped as is that of the government are admitted and given special courses during a period of 6 to 12 months. Our Filipino nurses are now rendering invaluable service in a number of provincial municipalities, as well as in private hospitals and government institutions. In the provinces these well-trained young women go from town to town visiting the sick in their homes and giving public lectures. Their services have proved of especial value in combating epidemic diseases like bacillary dysentery. As was to be anticipated, it has proved most advantageous to be able to deal with the more ignorant classes through competent persons who can talk with them in their native dialects.

The only thing which prevents my recommending a radical increase in the number of scholarships available at the training school is the fact that after exhausting every available inch of space in the general hospital and utilizing room badly needed for other purposes existing dormitory facilities are very inadequate for the number of nurses already in training. The proposed new nurses' home for the graduate Filipino nurses should be erected at the earliest possible time, and I earnestly recommend that this be done.

THE FLY MENACE.

Flies are less common in the Philippines than might be anticipated in a tropical country, but at times they become a nuisance and a serious menace to the public health. The bureau of health is succeeding in making them unpopular through the agency of public lectures and the circulation of a bulletin printed in a simple, readable form. The bureau of education has rendered most valuable assistance in this work.

WORK OF THE MANILA FREE DISPENSARIES.

The bureau of health maintains free dispensaries in the Philippine General Hospital and the San Lazaro Hospital, and at each of five outlying health stations. It contributes medicines to five private hospitals in the city for use in charity cases. The dispensaries not directly under the bureau have always made a small charge for medicines when patients were able to pay. The dispensaries of the government had not done this until April 1, 1913, but as this liberality in giving medicine away was abused the custom has been inaugurated of collecting a nominal fee of 20 centavos for each prescription or dressings from persons obviously able to pay. There has been no material resulting falling off in the number of patients treated, as those who really can not afford to pay are still supplied with medicines free of charge.

WATER AND HAND BORNE DISEASES.

There has been no cholera in the Philippines during the year and dysentery is on the decrease, but typhoid fever is gaining ground. The same measures which are effective in dealing with cholera are employed in combating the other two diseases, and the campaign never ceases.

HOME PASTEURIZATION OF MILK.

Attention has elsewhere been called to the insanitary character of much of the milk sold in Manila. The bacteria found in fresh milk averages about 7,000,000 to the cubic centimeter. It is essential that such milk should be sterilized before feeding it to infants. The bureau of health has issued a circular showing how this may be readily done by the poor at home, and every native family is being furnished with a copy of it by sanitary inspectors who personally call attention to its value and explain any parts of it which are found not to be understood.

MEDICAL INSPECTION OF MANILA SCHOOLS.

Medical inspection of the Manila public schools has been continued through the year. The number of pupils examined was 2,466. The necessity for such examination is conclusively demonstrated by the fact that 1,649 cases were referred for treatment, as follows:

Afternoon school clinic (school inspector).....	909
Eye and ear clinic, Philippine General Hospital.....	251
Dental clinic, Philippine General Hospital.....	89
Municipal physicians.....	22
Other physicians and clinics.....	378
Total.....	1,649

As a result of this work the more serious forms of skin trouble are becoming rare among school children, and trachoma is well under control. Tuberculosis presents a serious problem. There are some cases in every school. An open-air school should be established for the treatment of tubercular and anemic children.

INFANT MORTALITY.

This subject is one of vital importance, and I quote in full the statements concerning it made by the director of health in his annual report:

The disastrous effect of a high infant mortality and the need of concerted action to check it is appreciated the world over. Conditions in this country are not relatively worse than in many other parts of the world. The startling revelations of vital statistics have aroused practically every nation to the tremendous waste which the appalling death rate of children under 5 years of age imposes upon the resources of the world as represented by its greatest assets—human life and human health. Not only must the life of the children be considered, but the drain upon the mothers and the impoverishing effect upon families must enter into the final estimate. Such a drain interferes with the growth and economic progress, morality, and evolution of a country.

The moral question involved transcends the mere duty of every human being to save such lives. It will in the course of time exert a vital influence on a nation's faith and social attitude. Mothers who are forced to yield more than half of their children to the grave while they are yet dependent on their love for their very existence can not forever maintain a spirit of resignation and charity. In time their hearts will harden and their attitude toward their fellow beings change, and so will a nation change, for it is upon the character of its motherhood that the character of a nation or people depends.

Thousands of dollars are spent in building life-saving stations for those who brave the fury of the angry seas; many are the devices that have been invented for rescuing those who are threatened by the flames; yet too often helpless children are left to cruel fate.

Experience and science have demonstrated that a large proportion of the children who die can be saved; that the greater part of such deaths are unnecessary; that every

year countless numbers of children in every country are sacrificed on the altar of ignorance, indifference, or willful neglect.

This country is not behind in the awakening crusade that seems to be world-wide. The Philippine Legislature has taken up the question and a scientific committee is now investigating the problem. Even in the remote provinces health officers are holding hygienic conferences.

Congresses on child welfare and child hygiene have been recently held in the United States, England, France, and Germany, and other meetings of this nature are being arranged for in other countries. Every phase of the question is being investigated and it is hoped that the next few years will witness a decrease in infant mortality commensurate with the efforts that are being directed against this formidable obstacle to the world's progress.

In the Philippines much evidence has accumulated which appears to show that beriberi in mothers is associated with the high death rate of children under 1 year of age.

The Committee on Infant Mortality which was created by an act of the legislature has been at work for more than one year and will probably make a report of its finding and recommendations in the near future.

TUBERCULOSIS.

The great white plague continues to prey ruthlessly upon the inhabitants of the Philippine lowlands. At the biennial meeting of the Far Eastern Association of Tropical Medicine held in Manila in March, 1910, the subject of tuberculosis in the Philippines was thoroughly discussed and the conclusion reached that no substantial headway could be made against the spread of the disease without the hearty cooperation of the people through a great antituberculosis organization, such as now exists in many of the civilized countries of the world. The Philippines are the first of the far eastern countries to establish such an association.

The Philippine Anti-Tuberculosis Society is incorporated under insular laws. It is controlled by a council of 11, elected at the annual meetings by the active members. The president may form divisions of the society by appointing a director, a secretary, and a treasurer in any provincial capital.

The most important work of such an organization is obviously educational. The well must be prevented from contracting infection and those in the early stages of the disease must receive seasonable advice as to what they should do to be cured. The next thing of paramount importance is the establishment of sanatoria for early cases, and of hospitals for cases which are so far advanced as to make cure impossible but are nevertheless a danger to the community because they serve as centers of infection.

The Anti-Tuberculosis Society has inaugurated a very valuable educational campaign and has agitated, thus far in vain, for sufficient funds to erect a hospital for advanced cases.

At San Juan del Monte, near Manila, it is operating a hospital for incipient cases with a considerable degree of success. It maintains five clinics and free dispensaries in Manila, with an average weekly attendance of 328. All patients are visited in their homes by graduate nurses in the employ of the society, who give them special instruction regarding the more essential features in the treatment and prevention of tuberculosis.

This society is in the highest sense an organization "of the people and for the people."

Conditions at Baguio, where there are a cool climate and a bountiful supply of fresh, pure water, an abundance of fresh vegetables

and small fruits and beautiful pine forests, make it an ideal place for the treatment of tuberculosis, and each year adds to the evidence that its climate is most beneficial for those suffering from this disease.

Appropriations for combating tuberculosis are made directly to the Philippine Islands Anti-Tuberculosis Society. The bureau of health has cooperated in the work of the society in every possible way, and has done much in independent work with its own funds. At its advanced-case hospital on the San Lazaro grounds there is an average attendance of more than 50. No case that applied there during the year was refused admittance. The Baguio Tuberculosis Camp for the treatment of early cases has been filled to its limited capacity and very satisfactory results are obtained there.

Antituberculosis work in the Philippines suffered a most serious loss when Mrs. Eleanor Egan, president of the Anti-Tuberculosis Society, returned to the United States. Mrs. Egan had given lavishly of her time and her boundless energy to the work of the society, and her place will not soon be adequately filled.

NEED OF A NEW CREMATORY.

The only crematories in the Philippine Islands for human bodies are two operated by the bureau of health on the San Lazaro Hospital grounds. Both are out of date and a new modern crematory should be constructed, leaving the old ones for emergency use. This would give a decided impetus to the cremation idea, which, in the opinion of the director of health and myself, should be fostered so far as possible.

DECREASE IN THE MANILA DEATH RATE.

There has been a marked decrease in the Manila death rate, especially during the last six months of the year. The following table shows the rate for these months, also the average rate for the same months during the previous five years.

Months.	Average death rate for five years previous.	Death rate for 1913.
January.....	40.27	25.23
February.....	35.07	24.76
March.....	33.68	22.66
April.....	31.62	22.95
May.....	31.64	25.33
June.....	33.58	22.95

The decrease in water-borne diseases, owing to the radical improvement in the water supply and to the increasing use of distilled and artesian waters for drinking purposes, seems to have been the greatest single factor in bringing about this important result; but the growing use of the new sewer system, the better disposal of garbage and refuse, frequent street sweeping, improvement in the quality of foods and drugs in common use, the effective isolation of persons suffering from dangerous communicable diseases, greatly increased and im-

proved hospital facilities, the regulation of milk supplies, the enforcement of building ordinances resulting in the construction of more sanitary houses, and the obliteration of many insanitary slum districts have all played their part.

RELIEF FOR SUFFERERS FROM TYPHOONS.

The preparedness of the insular government to cope with sudden emergencies was demonstrated by the fact that within five hours from the time the first news of the Cebu typhoon was communicated to the several bureaus concerned, a steamer loaded with the necessary relief supplies had sailed. The bureau of health placed on board it a complete hospital equipment with sufficient medicines and supplies to relieve distress throughout widely separated regions, and sent a force of 8 doctors, 6 Hospital Corps men, and 3 nurses to supplement the force already available and on the ground. The Hospital Corps men were furnished through the courtesy of the United States Army.

The storm caused more than 400 deaths in the Province of Cebu alone, but the number of wounded was comparatively small. There was also serious loss of life in Samar and in Leyte.

THE HIGH COST OF MEAT IN MANILA.

The following table shows the present cost of meat in Manila as compared with that at the neighboring city of Hongkong:

	Hongkong.		Manila.	
	Unit.	Cost. ¹	Unit.	Cost. ²
Porterhouse.....	Kilo.....	\$0.35	Kilo.....	P0.94
Sirloin.....	do.....	.35	do.....	1.12
Round.....	do.....	.35	do.....	.70
Rib roast.....	do.....	.35	do.....	.88
Soup meat.....	do.....	.28	do.....	.56
Soup bone.....	do.....	.07	do.....	.31
Flank.....	do.....	.24	do.....	.80
Tenderloin.....	do.....	.57	do.....	2.32
Ox tongue.....	Each.....	.40	Each.....	2.50
Ox kidney.....	do.....	.09	Kilo.....	.90
Tripe.....	Kilo.....	.11	do.....	.60
Liver.....	do.....	.24	do.....	.665
Heart.....	do.....	.24	do.....	.60
Tail.....	Each.....	.17	Each.....	.60
Brains.....	do.....	.09	Kilo.....	.90
Beef suet.....	Kilo.....	.35	do.....	.70
Veal.....	do.....	.35	do.....	P0.60-1.30
Beef, whole hindquarters.....			do.....	.362
Beef, whole forequarters.....			do.....	.264

¹ Mexican currency.

² Philippine currency.

There can be no doubt but that these high prices tend to cause insufficient nourishment and thus injuriously affect the public health. Measures should be taken to stimulate the cattle industry in these islands. Refrigerated meat, even if not too expensive, is disliked by many of the inhabitants.

HEALTH CONDITIONS AT BAGUIO.

In 1912 the antilfly and mosquito campaign at Baguio produced the anticipated results, and health conditions at the summer capital were better during the 1913 season than ever before, diarrhea and dysentery, which had sometimes previously prevailed at the beginning of the rains, being conspicuously absent.

DISPOSAL OF EXCRETA.

The satisfactory disposal of human excreta is one of the fundamentally important sanitary problems awaiting solution in the Philippines. It is especially grave in provincial municipalities and settlements. The bureau of health has designed a simple, inexpensive, perfectly ventilated wooden receiver for the ordinary 5-gallon kerosene tin of commerce. It is fly proof and solves the problem. A determined effort to have it generally introduced is meeting with a large degree of success. Where no better means of disposal is available, the cans can be collected and emptied into a central pit, which can be kept in a sanitary condition with comparative ease.

SANITARY CONDITIONS AT THE IWAHIG PENAL COLONY.

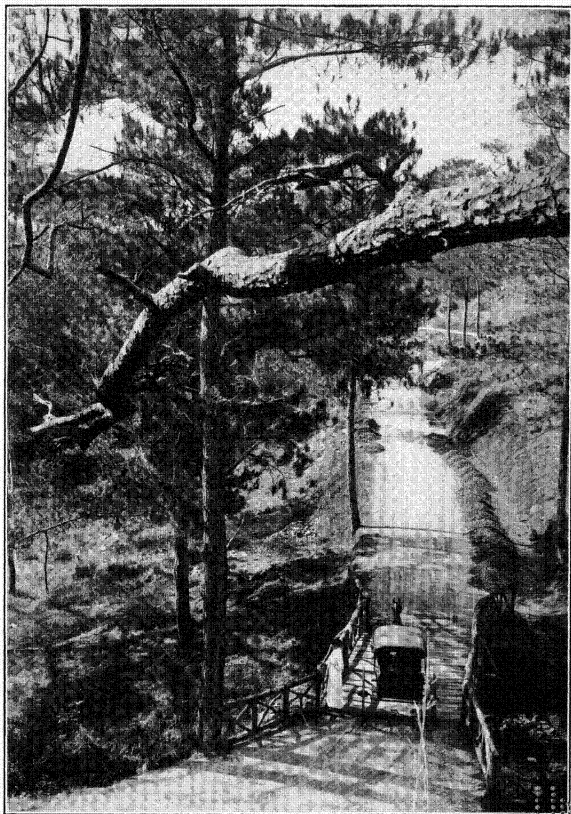
Early in the year the Iwahig penal colony was found to be in an unsatisfactory sanitary condition. Malaria was becoming prevalent and mosquitoes were found breeding in many places where such a result could have been prevented. A number of the colonists were not provided with mosquito nets, and oil was not available in sufficient quantities for antimosquito work. The hospital equipment was inadequate in amount and poor in quality. As a result of repeated representations by the director of health and myself, and the active intervention of the Governor General, great improvement has been brought about.

A TUBERCULOSIS HOSPITAL AT IWAHIG NEEDED.

The director of health has recommended the opening of a large outdoor tuberculosis hospital at Iwahig and the transfer thereto of all cases of tuberculosis from Bilibid Prison. Tubercular prisoners could thus be kept under better conditions than surround them at Bilibid, and those who recovered could have open-air employment which would give them hope of remaining well, instead of relapsing as so frequently happens with those who are discharged from the tubercular hospital at Bilibid, to live again in necessarily cramped quarters and in close contact with the remaining prisoners.

BACILLARY DYSENTERY.

One of the severest outbreaks of bacillary dysentery of which there is any record in the Philippines occurred during July, August, and the first half of September. Nearly every province was affected and the number of deaths ran into the hundreds. Printed circulars



AMONG THE BAGUIO PINES.

The cool climate of the wonderful summer capital of the Philippines has proved most beneficial in the treatment of tuberculosis.

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telling how to avoid the disease were promptly forwarded to district health officers with instructions to have their contents made known to the general public, and wherever those instructions were carried out there occurred a marked immediate reduction in the number of cases. In this work a number of graduate nurses from the Philippine Training School for Nurses proved very valuable. They went to the stricken districts, lectured in the native tongues, visited the homes of the people, and demonstrated to them how to avoid infection. Had more provinces been able to employ nurses a large additional number of lives might have been saved. Where the necessary sanitary measures were adopted the disease disappeared within a few days. Where they were not put into effect it usually lasted from 8 to 10 weeks.

DIPHTHERIA.

More cases of diphtheria came under observation than during any previous year. We do not know whether this was due to an actual increase in the prevalence of the disease or to the increased efficiency of the health service which led to its more frequent detection. There was very severe criticism of the policy of the bureau of health in isolating all persons found to be harboring the diphtheria bacillus in their throats even though they presented no other symptoms of the disease, but this policy was nevertheless persisted in with my full approval.

INSANITY.

There are 3,376 known insane persons in the Philippine Islands, or an approximate average of 1 to each 2,000 inhabitants. In the United States there is 1 to each 304 inhabitants. It is a fortunate circumstance that insanity is far less common here than in the United States, for at present we can care for only about 600 insane persons. This figure includes private as well as public institutions. Obviously the need of increased facilities is imperative. It is now a common practice to send insane persons from the provinces to Manila and abandon them there. The bureau of health is without funds which can be used to pay for their care.

LEPROSY.

Since the work of isolating lepers began, 7,546 have been collected. The number for the past year was 848. This work becomes constantly easier. Many cases now come forward voluntarily and ask to be taken to the Culion leper colony. The improvement in the provincial police service leads to the capture of increasing numbers of lepers who have heretofore kept hidden, but a considerable number escape after being apprehended by the municipal police, so that there still exist a number of centers of infection. Until this condition can be remedied, the decrease in new cases will not be so rapid as has been hoped.

Much has been done to alleviate the lonesomeness and monotony of the life of the lepers at Culion. They were given a grand Christmas owing to the great liberality of the Manila public, and especially to that of the merchants and the children in the public schools,

through whose kindness every leper at the colony received Christmas gifts. At this time a portable moving-picture outfit was taken to Culion and they much appreciated the entertainment given. A fine amusement hall is now practically completed. It is intended to install there a moving-picture outfit and an equipment for phonographic exhibitions, both of which will be greatly appreciated.

A large cooperative store, having its own currency and operated exclusively by leper employees, will soon be started. It will incidentally purchase any useful thing which a leper may produce, and it is hoped thus to stimulate many of these unfortunates to become in part self-supporting.

WORK OF THE SISTERS OF ST. PAUL DE CHARTRES.

The work of the sisters of St. Paul de Chartres who serve as nurses at the Culion leper colony continues to be beyond praise. In the out-patient service alone they dress the wounds of more than 400 lepers every morning. Through this self-sacrifice the lepers receive help which money could not buy.

MALARIAL FEVER.

Malarial fever causes approximately 25,000 deaths annually. Considerable progress has been made in its suppression by the free distribution of very large quantities of quinine. It is proposed during the coming year not only to continue such distribution, but to supplement it by literature and by illustrated lectures describing the manner of spread of malarial fever and the means which should be employed to combat it. If possible, arrangements will be made for the sale of quinine, even in very remote regions, at practically its cost to the government. At the present time quinine pills are sold in some places at the shockingly exorbitant price of 20 centavos per pill. It may prove best to place the drug on sale at all post offices and to make free quinine available for those really unable to pay for it.

SMALLPOX.

An outbreak of smallpox has occurred in Leyte, where more than 300 deaths have already been reported. They have been, practically without exception, among unvaccinated children who had been allowed to remain in this state through the utter shiftlessness of the local authorities. Occurrences of this sort conclusively demonstrate what would be the result were control of sanitary matters in the Philippines left to the Filipinos.

VARIOLOID.

One hundred and forty-five cases of supposed varioloid were reported in Manila, without a single death. The results of work performed by Maj. Ashburn, of the Army board for the study of tropical diseases as they exist in the Philippine Islands, throws much doubt on the correctness of the diagnoses of varioloid heretofore made. Maj. Ashburn's inoculation experiments have all resulted negatively, and there seems good ground for the belief that the

disease here commonly called varioloid is either chickenpox or some closely allied ailment.

The director of health states that there has not been a death in Manila from smallpox, varioloid, or a disease resembling either since June, 1909, a most remarkable result to have achieved.

FINANCES.

The work of the bureau of health has been carried out successfully in spite of the fact that the funds available were insufficient. It is now three years since the legislature has passed an appropriation bill for the current expenses of the government, and as a result the bureau had the same appropriation that it had three years ago plus a small special appropriation sufficient to make it possible to open the Cebu Hospital, but inadequate to keep it in continued operation throughout the new year.

The work of the bureau has steadily increased along many old lines and new lines have been taken up. The fight against the greatest of all enemies, tuberculosis, has as yet hardly begun. The need of a larger appropriation is very great, but the bureau will continue in the future to make the most of such funds as are placed at its disposal, as it has done in the past.

It is possible for me here to give only the briefest outline of the work of the bureau of health. A very full account of it will be found in the annual report of its director, which closes with seven specific recommendations. I will quote them, making my own recommendation in connection with each:

1. A tax upon polished rice in order to discourage its consumption, the accomplishment of which object will probably result in the saving of many thousands of lives annually and bids fair to reduce the infant mortality.

I most heartily concur in this recommendation. If carried out it will impose no hardship worth mentioning and the saving in human life, human suffering, and in the efficiency at present lost in the case of persons crippled but not killed by the disease will be enormous.

2. Legislative authority to abate nuisances on private property and to make the cost thereof a lien against the property.

I earnestly concur in this recommendation. The lack of such authority is the greatest remaining difficulty in connection with successful public health work in the city of Manila.

3. Restoration of the privilege to purchase medical and surgical supplies in the open market. The present system is both cumbersome and expensive and prompt relief for the sick is often unnecessarily delayed.

I concur in this recommendation. The purchase of most supplies through the insular purchasing agent is probably advantageous, but the purchase of medical and surgical supplies in this manner is in my opinion distinctly disadvantageous and should be discontinued.

4. A law to make the muzzling of dogs compulsory for several years. The enforcement of such an act would result in the eradication of rabies, which is now responsible for many deaths.

I regret that I can not fully concur in this recommendation. The director of health, in the body of his report, cites four known cases of human rabies with one death, and to remedy this condition he proposes to muzzle dogs throughout the islands. While it may be,

and probably is, true that there are a considerable number of unreported cases in the provinces, I deem it doubtful whether they are sufficiently numerous to demand such radical action as is proposed, and even were this the case it is in my opinion impracticable at the present time to bring about the effective enforcement of such a law, which would certainly be bitterly opposed by the more primitive of the people, who subsist to a considerable extent on game and use dogs in hunting it. In my opinion it would be far better to pass a general act imposing a fairly stiff tax on dogs, fixing a time before which it must be paid annually, providing for the proper tagging of all dogs on which the tax has been paid, and authorizing municipal policemen, constabulary soldiers, and other persons permitted to buy and use firearms to kill all untagged dogs. In this way the pest of worthless yellow curs which now exists in many municipalities would be abated. Owners of valuable dogs who cared enough for them to pay a tax on them would in most cases give them proper care and would kill them if they showed any sign of rabies. The only harmful result of such an act would be the occasional killing of a valuable dog from which the tag had been stolen, but the exercise of common sense on the part of the persons killing dogs would reduce this evil to a negligible minimum.

5. Further amendments to Act No. 2156 to permit more central control of provincial sanitation.

I concur in this recommendation. Further experience simply emphasizes the necessity for strong, centralized control if effective health work is to be carried out in the Philippine Islands.

6. An appropriation to construct additional buildings for the insane and to provide for the maintenance of a largely increased number. The present facilities are entirely inadequate to meet the needs of even the most urgent cases of insanity.

As hereinbefore set forth, the need of additional service for the care of the insane seems imperative. I heartily concur in this recommendation.

7. The adoption of a plan by which the lowlands of Manila will be more rapidly filled in and the esteros walled and made more sanitary.

This work should unquestionably be done as rapidly as the other needs of the city and the funds available will permit.

A BUREAU OF QUARANTINE SERVICE.

Not a single case of cholera was reported from any part of the Philippines during the year. The fact that the islands were absolutely rid of this disease made it more than ever important that its reentry should be prevented and in this the quarantine service has been completely successful in spite of the fact that there was a serious outbreak in neighboring Asiatic cities. Unquestionably the procedure which made this result possible was the making of stool examinations of all steerage passengers from infected ports.

During the quarantine period from July to November this work was done at the Mariveles station by a special officer from the bureau of science; subsequently it was done at Manila. In all 6,997 specimens were examined. Of these 5,259 were also examined for intestinal parasites and it was found that 7.1 per cent contained hookworm, 33.8 per cent contained ascaris, and 17.7 per cent contained trichiuris.

MEASLES.

There were 22 deaths from measles in Manila and 1,915 in the provinces.

Mention was made in my last annual report of the serious results attending the introduction of what is believed to have been a foreign strain of measles into the Philippines. A number of conferences were held with officers of the United States Army with a view to the adoption of measures which would prevent the further introduction of measles by passengers on Army transports and there resulted the following set of regulations:

(1) The military authorities continue to exercise all the care heretofore exercised to prevent the spread of the disease.

(2) That in the fullness of precaution, each infected man's locker and his clothing in use be disinfected on the transport as soon as the diagnosis is made.

(3) That all personnel infected be sent to hospitals and suspects be kept under observation of medical officers, in hospitals if necessary, if belonging or attached to the military service, while civilians infected or exposed be notified to the bureau of health and placed under its control.

BUBONIC PLAGUE.

In my last annual report I had occasion to mention the occurrence at Manila of a case of bubonic plague on June 17, 1912. Cases have continued to occur in the Philippines at intervals ever since. During the fiscal year there were 74, with 63 deaths. Sixty-five of these cases, with 54 deaths, occurred in Manila, while at Iloilo there were 9 cases and 9 deaths.

Plague was promptly wiped out at the latter place through the intelligent activity of Surg. Fox and his assistant. The first case occurred on July 5 and the last on September 17, 1912.

At Iloilo, as at Manila, the disease did not begin along the water front, nor among persons who had been away from the city, or who would have been likely to come in contact with others arriving on foreign ships. It is believed to have been introduced either by bedbugs carried ashore in cargo or by rats hidden away within cargo containers. The fact of its introduction at two Philippine ports in spite of the efforts of the quarantine service clearly indicates the necessity of further refinement in quarantine methods. The Manila wharves are rat proof, and cats make short work of any rats which land, upon them, as the latter can not find hiding places. Efficient rat guards are placed on all mooring ropes. Gangways, cargo chutes, etc., are raised when not in actual use; vessels from plague-infected ports are fumigated with sulphur at least twice annually and ships carrying rice are fumigated upon each trip.

In April, 1912, after cases of human plague had been detected at quarantine upon arriving vessels, all ships from Hongkong and Amoy were also fumigated on each trip. There is always a possibility that in baskets of eggs, garlic, onions, and similar foodstuffs as well as in cases of glassware, chinaware, and bottles packed in hay or straw, rats may find shelter. The number of such cases is so large as to make it impracticable to unpack all of them in searching for rats, and it is not apparent at this time just how the difficulty can be met.

It has been determined that both bedbugs and red ants escape during ordinary fumigation by crawling into interstices of wood and and

into similar hiding places where sulphur fumes do not penetrate. It is possible, and indeed probable, that both of these kinds of organism may assist in transmitting plague. Certainly both bite human beings, and smears from the intestinal contents of bedbugs taken near plague patients have shown plaguelike bacilli.

SHIP SANITATION.

The enforcement of stringent regulations relative to the sanitation of ships has made interisland travel not only far safer, but far more comfortable, than heretofore.

BUILDINGS AND EQUIPMENT.

The buildings and equipment of the several stations have been maintained in good repair throughout the year with the exception of the disinfecting barge at Iloilo, which was run into by a steamer and badly damaged. It had previously deteriorated to such an extent that repairs are hardly practicable. Every effort is being made to obtain a site on land for the Iloilo disinfecting plant.

The quarantine station buildings at Cebu were badly damaged by the great typhoon which devastated that city, but have been repaired. A contract has been let for the construction of a concrete wharf 300 feet long at Mariveles. This will accommodate vessels drawing 30 feet. The old wooden pier at that place is rapidly deteriorating. The five launches of the bureau have been maintained in good condition, but all are getting old, so that the annual repair bill is considerable. Funds are available for the purchase of one new launch.

Full details of the work of the bureau of quarantine service will be found in the annual report of its director.

BUREAU OF FORESTRY.

EFFORTS TO SECURE REMEDIAL LEGISLATION.

Under existing law forest charges are based on the volume of timber in the round, but if a licensee elects to manifest his timber after it is sawn he may do this by adding to the volume of the timber thus manifested 15 per cent to cover the loss in sawing due to slabs, sawdust, edgings, and waste of all kinds, whether necessary or unnecessary. This percentage was fixed at a time when most of the lumber was cut by hand with very thin saws, and when the labor involved in getting out logs with the primitive methods then in vogue was so great that lumbermen exercised all possible care to avoid unnecessary waste. The kerf of modern saws is much greater than that of those formerly in use. Logs are now brought to the mill by logging railways and skidding engines at a comparatively small cost, and as one result with few exceptions the mills of the islands are grossly wasteful in the matter of slabs, edgings, etc. This waste costs the lumberman nothing in government charges if he pays on sawn lumber, while the government also loses charges on lumber which rots, burns, or is stolen or destroyed by insects in the yards before being manifested,

as well as on that which dishonest lumbermen may smuggle off to market without manifesting it at all. Furthermore, the government gets nothing on logs carelessly stored along or in streams, and carried to sea during heavy floods, nor on those hauled to the beach and washed away during storms.

Measurement in the round would impose on lumbermen the necessity of paying for the timber which they actually cut, would make them more careful to utilize that for which they had been obliged to pay, and would eliminate losses of the other kinds above mentioned. Measurement in the round is, furthermore, quick and simple. If this system were adopted, the employees of the bureau of forestry alone would be able quite accurately to measure the timber used by the several mills of the islands. The force at the disposal of the bureau is entirely inadequate to measure the sawn lumber produced at these mills and at the same time to perform its other duties. The bureau of internal revenue, which has charge of this work, in which the bureau of forestry can intervene only when its officers or employees are appointed internal-revenue agents, makes no pretense of measuring sawn lumber at the mills, but allows mill owners to have their own employees manifest their lumber with no other check on their honesty than that afforded by the shipments of lumber received at the more important market centers.

A bill providing that all government timber should be measured in the round passed the Commission. Although the fact that it was under discussion was publicly known, not a single protest against it was received by me. It was quietly killed in the Assembly.

I renew my protest against the method of measurement at present in vogue. It leads to heavy losses in the dues which should be collected, and places a premium on carelessness and dishonesty.

FILIPINO FOREST EMPLOYEES.

The Forest School at Los Baños is steadily turning out well-trained Filipinos for the forest service. During the past year 26 of its graduates have been appointed rangers.

FOREST CONCESSIONS.

Only three forest concessions, or exclusive license agreements as they are more popularly called, were granted during the year: One for a tract on the shores of Dumanquilas Bay in southern Mindanao; one for a forest tract in Tayabas and Ambos Camarines; and one covering certain mangrove swamps in Masbate. No sawn timber will be cut under the last-named concession, but the mangrove wood will be utilized for fuel. The development of the other two concessions will mean the establishment of two new lumber enterprises of large importance, as under the terms of the agreements modern equipment of the best type must be used and the outputs must be large.

PROPOSED NORTHERN NEGROS FOREST RESERVE.

In the northern half of the Island of Negros there is a forest estimated to contain some eight billion feet of merchantable timber. It is one of the finest stretches of unbroken woodland to be found in the

Philippines, the elevation of the forested land above sea level being from 100 to 8,000 feet. The concession areas of the Insular Lumber Co. and the Negros-Philippine Co. are located in this forest, which covers some 600 square miles of almost uninhabited territory, much of which is rough, precipitous, and suited only for permanent forest cover. In it are streams of the utmost importance to the neighboring fertile lowland plains. Existing industries and the much more important industries which will doubtless develop later in this rich agricultural region must depend on this forest for timber, firewood, and other forest products, while at the present time about 15,000,000 board feet of lumber are supplied by it to the general Philippine market yearly. It is obviously of vital importance that logging operations should be conducted in such manner as to improve rather than to destroy it and that the *caingin* maker should be rigorously excluded. I have therefore approved the setting aside of this area as a forest reserve. The necessary preliminary work has been nearly completed and recommendation will soon be made to the Governor General that a formal proclamation establishing the reserve be issued.

ATIMONAN FOREST RESERVE.

On January 28, 1913, the Atimonan Forest Reserve was created by proclamation of the Governor General. This insures the protection of a very fine tropical forest readily accessible to tourists because an automobile road runs through it, and of great importance to a thickly settled region which is, and must continue to be, dependent upon it for forest products of all kinds. Four municipalities now draw upon it for timber, firewood, and other forest products.

THE PROPOSED SALINAS FOREST RESERVE.

At Salinas, in the Province of Nueva Vizcaya, there is a great salt spring where enough salt is manufactured to meet the needs of the inhabitants of central and northern Luzon. The spring water is boiled down in great kettles. The available firewood in the vicinity of the spring has been ruthlessly destroyed. I deem it a matter of great importance that a forest reserve should be established covering the land in the vicinity of this spring, not only to the end that the small remaining supply of firewood may be promptly conserved, but to facilitate reforestation and thus provide fuel for the future. I have, therefore, approved the establishment of such a reserve, at the same time providing for the running of the spring water through numerous brush piles before it is boiled, to the end that the sun and wind may do the greater part of the evaporation and that fuel may be used only after a saturated brine has been produced.

LICENSES.

Four thousand and ninety-five licenses were issued as against 3,495 for the previous year, showing that the public forests are being utilized to a steadily increasing extent. One thousand two hundred and forty-eight of these were gratuitous licenses for personal use and 50 were gratuitous licenses for public works.

COMMUNAL FORESTS.

There is a steadily increasing demand for the setting aside of communal forests for the benefit of the several municipalities. Forty-five were established during the year and 11 more have been examined and will be established in the near future. Twenty-nine applications are pending examination. These communal forests are now distributed between the several provinces as follows:

Albay.....	2	Moro.....	1
Ambos Camarines.....	7	Mountain Province.....	5
Antique.....	1	Misamis.....	6
Bataan.....	13	Negros Occidental.....	3
Cagayan.....	1	Negros Oriental.....	3
Capiz.....	4	Nueva Ecija.....	2
Cebu.....	1	Pangasinan.....	16
Iloilo.....	1	Sorsogon.....	3
Ilocos Norte.....	12	Tarlac.....	2
Ilocos Sur.....	26	Tayabas.....	12
Isabela.....	1	Zambales.....	11
La Laguna.....	3		
La Union.....	9	Total.....	148
Leyte.....	3		

CAIÑGINS.

In each preceding annual report it has been necessary to call attention to the destructive caiñgins, or illegal forest clearings, which annually result in enormous damage to the Philippine forests. Progress in preventing them has been made during the past year, but it is hardly too much to say that it has been made in spite of the prosecuting officers (fiscals) rather than with their assistance, which has seemed in many cases, even when given, to have been furnished only as a result of explicit orders from official superiors. The district forester in charge of south-central Luzon says:

In Tayabas 26 illegal caiñgins have been reported on and complaints in the different cases filed with the provincial fiscal. In Mindoro 25 caiñgins have been reported on and the complaints and necessary documents filed with the provincial fiscal. In none of these cases have reports been received from the fiscals concerned, and it is my belief that little attention is paid to such complaints by fiscals.

The forester in charge of the district of the Visayas says:

There have been reported to the provincial fiscals of this district during the year 96 cases of violations of the caiñgin law and the double charges on the timber invoiced in this connection are ₱631,539.32. Of these cases 80 were sent to the provincial fiscal of Capiz, invoices for which total nearly ₱620,000. No advice has been received to show that any of these cases have been concluded. One case, the invoice of which amounts to ₱10,644.80, was sent to the provincial fiscal of Iloilo Province, and action has been taken and reported showing that the accused was fined ₱10. This same fiscal reported that a ₱10 fine has been imposed in connection with each of two cases referred to his office during the fiscal year of 1911-12. The invoices of one of these cases amounted to ₱1,033.20 and the other to ₱129.52. Seven cases, the invoices for which amount to ₱531.88, were sent to the fiscal of Leyte, who has reported that the papers had been referred to the justices of the peace of the various municipalities where the caiñgins were made. Eight cases, invoices for which total ₱1,183.38, were sent to the fiscal of Negros Occidental, and I am glad to be able to report that the courts have taken prompt and decisive action. * * *

In Capiz there are now pending over 220 cases, most of which have been in the hands of the provincial fiscal for nearly a year and no results have been reported.

The provincial fiscal of Negros Occidental, on the other hand, has been gratifyingly active. In six of the cases referred to him action has been taken, resulting in the imposition of adequate fines, together with sentences of imprisonment in each case of from 10 to 30 days. Were fiscals in general similarly efficient cañgin making would soon become unpopular. Without the effective cooperation of prosecuting officers the bureau of forestry is powerless to prevent the present wanton destruction of one of the most important natural resources of the Philippines. The attorney general is cooperating with the bureau in efforts to check this destruction. On May 29, 1913, he issued a circular letter to all provincial fiscals instructing them to prosecute vigorously all cases of violation of the provisions of the forest act relative to cañgin making and to endeavor to see, after consultation with the officer of the bureau of forestry, that every available proof is presented so that adequate punishment is meted out to all violators of the forestry laws. It is hoped that as a result of this order there will be great improvement in the enforcement of the law during the coming year.

STUDY OF MANGROVE SWAMPS.

The bureau has devoted a considerable amount of time to the study of Philippine mangrove swamps and has found that they are more extended than has heretofore been supposed. Those of Mindanao alone are estimated to aggregate to 130,000 hectares, while there are other important areas in Ambos Camarines, Albay, Sorsogon, Samar, Luzon, Mindoro, and Palawan. Numerous swamps of some importance, though smaller than those of the above-mentioned islands, are found elsewhere.

The wood of several mangrove species gives promise of great durability. There are three different species which are known to make excellent piling, and it is probable that there are several others which are suitable for the same purpose. Durability tests of bacauan railroad ties are now under way. In a number of regions in the Philippines bacauan is planted in solid stands and is eventually cut for firewood. As a rule, mangrove swamps in the vicinity of large centers of population are now badly overcut, while those in more remote regions are in a virgin state. Accurate knowledge of the location and area of all important swamps is obviously a matter of much importance to the public.

INVESTIGATION OF NIPA SWAMPS.

The leaves of the nipa palm are extensively used in the construction of the roofs and sides of houses of so-called "light materials" in the Philippines, and the juice obtained from the fruit stalk is the principal source of the alcohol manufactured in the islands. Many of the swamps are privately owned and are more or less carefully cultivated. Others are situated on the public domain. It seems probable that the area covered with nipa in the Philippines is considerably smaller than has heretofore been supposed. While it is true that the commercial manufacture of the products of the nipa palm can only be conducted profitably upon a large scale, necessitating the utilization of much larger areas than can be purchased, even by corporation,

under the provisions of existing law, this is really no obstacle to the utilization of the public nipa swamps, as the bureau of forestry can grant exclusive license agreements for the collection of nipa products from such areas. Up to the present time no tax has been imposed on the sap or leaves gathered from public nipa swamps because these products have not been harvested on such a large scale as to make it worth while to attempt to collect taxes on them. The authorized tax of 10 per cent of the market value would of course be levied were the sap and leaves collected on a commercial scale.

REFORESTATION.

The subject of reforestation is one of great practical importance to the Philippines, especially in such islands as Cebu, where the cañgin maker has almost completely destroyed the original forests so that even firewood is expensive and difficult to obtain. The bureau of forestry has been conducting interesting experiments in the growing of ipil-ipil and mandre cacao. The former grows readily in grassland which has been burned over, and attains a height of from 12 to 15 feet in a year, ultimately reaching a diameter of 6 inches and a height of 30 feet. After a stand has once been established it can be completely cut over at frequent intervals without danger of destruction. Well-established stands are claimed to produce as much as 10 cords of firewood annually per acre.

LACK OF SUFFICIENT BUREAU TRANSPORTATION.

Forest work in the Visayas and in the districts of Mindanao and Sulu is very greatly hampered by lack of transportation. The value of the time lost by forestry officers while waiting for boats, to say nothing of the unfortunate consequences of long-continued delay in their prompt arrival when their presence is necessary, would compensate for the cost of purchase and operation of the two sea-going launches which are needed in order to remedy the deficiency. I recommend that these launches be obtained and placed at the disposal of the bureau.

FOREST RECONNOISSANCES.

Among the most important things accomplished during the year by the bureau of forestry has been the making of forest reconnoissances covering the Island of Basilan, and a very large tract in northern Mindanao. The information obtained is of the greatest practical value to persons contemplating the establishment of lumber industries in these regions.

Very careful attention has been given to increasing the efficiency of the office force and the field inspection force of the bureau and the results obtained have been most satisfactory.

INADEQUACY OF THE FIELD FORCE.

The inadequacy of the existing field force of the bureau of forestry properly to supervise cutting operations in the forests of the Philippines is too well known to require discussion. I have previously strongly urged upon the Legislature the desirability of establishing

a definite relationship between the total annual government collections on forest products and the annual appropriation for the bureau. There is obvious interdependence between the extent of cutting operations and the size of the force necessary to control them. Furthermore, the bureau of forestry would thus be given a direct interest in collections which would be likely to result in their material increase.

Attention is invited to the fact that every previous increase in the force of the bureau made in recent years has been followed by a prompt increase in revenue. I renew my recommendation that 60 per cent of the total government collections on forest products be appropriated annually for the expenses of the bureau of forestry during the succeeding year.

A detailed review of the work of the bureau will be found in the full and interesting report of its director.

BUREAU OF SCIENCE.

CHOICE OF A DIRECTOR.

At the time of Dr. Freer's death two alternatives confronted me in the matter of making recommendation as to his successor.

One was to attempt to secure from the United States a candidate with an international reputation, comparable as nearly as possible with that of Dr. Freer, and recommend him for appointment. This procedure was open to the objection that it was extremely doubtful if another such man could be found who would be willing to give up original research and devote his energies to managing the very large business affairs of the bureau and to planning and coordinating the research of others. Apart from the difficulty involved in finding a man who combined the requisite business ability and scientific attainments there was the further fact that any possible candidates were likely to be university men, unaccustomed to, and impatient of, the restrictions necessarily imposed by our civil-service law and rules and by the rulings of the insular auditor. Finally it was obvious that such a course would result in discouragement to the men who had been steadily working up in the bureau as a result of the faithful and efficient performance of their duties.

The other alternative was obviously to appoint one of the latter group of men. Among them there was no one available whose reputation as an investigator equaled that of Dr. Freer, but all of them were familiar with and accustomed to local conditions.

Dr. Alvin J. Cox had for some time been assisting Dr. Freer in directing the work of the bureau and, in fact, at Dr. Freer's own suggestion had been put in training to succeed him. It was my opinion that he should be appointed acting director and given an opportunity to make good. I so recommended, and my recommendation was favorably acted upon by the Acting Governor General. Dr. Cox has made good. I have recommended that he be appointed director of the bureau, and that Dr. H. D. Gibbs, the next man in rank below him, be appointed to the position of assistant director thus made vacant.

THE BIOLOGICAL LABORATORY.

Dr. Richard P. Strong, chief of the biological laboratory, went on leave in July, 1912, on account of very serious illness. He has since resigned to accept a position as chief of the department of tropical medicine in the Harvard University Medical School. Dr. B. C. Crowell, pathologist, has been detailed for one-half of his time as chief of the department of pathology and bacteriology in the College of Medicine and Surgery. Mr. Ariston M. Guzman has taken leave and has gone to take up work in the Bennet Medical College, Chicago. The resignation of Mr. Porter Leakey was accepted April 15, 1913, and three assistants in the routine laboratory have left during the year and have been replaced by new men. The position of chief of the biological laboratory is still unfilled, and the laboratory has been short-handed throughout the year.

Its routine work steadily increases. Branch laboratories are maintained at the Philippine General Hospital and at Bilibid Prison in order promptly to handle the work of these institutions. The reappearance of bubonic plague has necessitated the examination of hundreds of thousands of rats and the bacteriological diagnosis of a number of cases of suspected plague in human beings.

For the year 1912 there was an increase of 45 per cent in routine examinations over the previous year. The following table shows the increase for 1913 as compared with 1912:

Nature of examination.	1912	1913
Blood.....	3,951	23,450
Blood culture.....		226
Widal test.....		388
Wassermann test.....		727
Urine.....		6,974
Sputum.....	3,925	5,770
Feces.....	22,733	34,530
Gonococci.....	15,971	20,522
Leprosy.....		848
Plague.....		45
Rats for plague.....		(¹) 5
Rabies.....		
Necropsies.....	59	130
Historical examination.....	455	606
Water.....	742	1,077
Miscellaneous.....	4,594	57,916
Total.....	51,941	153,220

¹ Included under miscellaneous.

Original investigation has, of course, been greatly hampered by the fact that the laboratory was short-handed and by the increase in routine examinations. Nevertheless, important research work has been done on bubonic plague, cholera, bacillary dysentery, leprosy, entamœbic dysentery, as well as on various other diseases. One of the most important pieces of work has been a study of the part played by the domestic pig as a carrier of infection.

A mysterious disease which caused some fatalities in Ambos Camarines was studied on the ground. No positive results were obtained prior to its disappearance, except to demonstrate that it was neither plague nor anthrax.

LOCUST EXTERMINATING BACTERIUM.

Experiments with the supposed locust-extminating bacterium, *Coccobacillus acridiorum* of D'Herelle, made in cooperation with Mr. C. R. Jones, of the bureau of agriculture, were negative in their results. If this infection has really succeeded elsewhere, its failure here may be due to different meteorological conditions or to a difference in the species of locust.

SERUMS AND VACCINES.

The amount and variety of the work performed by the bureau in the preparation of serums and vaccines is probably not generally understood. I quote the following summary statement relative thereto from the report of the acting director:

The preparation of variola vaccine (vaccine virus) was continued throughout the year. Cholera prophylactic, plague prophylactic, gonococcus vaccine, staphylococcus vaccine, typhoid vaccine, and streptococcus vaccine were prepared in moderate quantities. Anthrax vaccine, tuberculin (both human and bovine), and mallein were continually kept on hand.

Antidiphtheritic, antitetanic, anticholera, antityphoid, antiplague, antidysenteric, and antistreptococcic sera were made in quantities sufficient to supply the demand.

Typhoid, paratyphoid, and cholera reagents (killed cultures) for agglutination; agglutinating sera, in liquid and in dried form, for the purpose of diagnosing infectious diseases and identifying bacteria; as well as normal sera of horse, ox, sheep, and goat were always kept on hand. Other sera, such as those of dog, cat, rabbit, and guinea pig, are supplied on request. Sterile blood or washed blood corpuscles of horse, ox, sheep, goat, rabbit, and guinea pig are also furnished on request.

RABIES.

The work on rabies was continued throughout the year. Thirty-five patients applied for the Pasteur treatment.

BOTANY.

Botanical work has been actively pushed in spite of the fact that Mr. E. D. Merrill, chief of the botanical section, was detailed in July, 1912, to serve as associate professor of botany and acting head of the department of botany in the College of Liberal Arts, and has since given half of his time to that work.

Twelve thousand eight hundred and seven specimens have been poisoned, mounted, and distributed into the herbarium. Some 39,200 duplicate specimens have been distributed to various institutions and to individual botanists either in exchange for other specimens or for purposes of identification. More than 10,000 identifications have been made, mostly of Philippine plants, but including also plants from Guam, New Guinea, Java, Formosa, and Borneo. Identifications have been performed for the bureaus of education, forestry, and agriculture. A large additional amount of practical work, which will be found fully described in the report of the bureau of science, has been performed during the year.

ENTOMOLOGY.

Much time has been given to field investigations, to the collection and study of injurious insects at the call of private individuals or other bureaus of the government, and to the practical work of exterminating mosquitoes, flies, and other insect pests in regions

where they were doing serious harm. Large additions have been made to collections and more identifications have been made than during any previous year. The division of entomology is peculiarly fortunate in now having six of the world's leading specialists as coworkers.

FISHERIES.

While absent on leave in the United States Mr. Alvin Seale visited some of the large sardine canneries and endeavored to arouse some interest in the establishment of canneries in the Philippines. Samples of the Philippine sardines and anchovies have been requested and have been furnished.

The demand for the thin transparent shells so extensively used in this country as a substitute for window glass has increased. Requests for these shells have been received from Australia, the Hawaiian Islands, and the United States, and have been forwarded to Manila dealers. The bureau has planted some shells in a suitable portion of Manila Bay.

Another button factory has been opened in Manila and the local demand for shells for use in button manufacturing has materially increased. The price for the "top" shell, for instance, has advanced from ₱8 to ₱20 per picul. This has created a tendency to gather young and immature shells.

The black-lip pearl shell which heretofore has not been much used is now being taken in very large numbers for button making.

For the first time in the history of the islands the "scoop" or "ear" pearl shell is being gathered and made into buttons. This shell was considered valueless until Mr. Seale called attention to it.

The need of legislation prohibiting the taking of undersized shells is evident, as is the desirability of taking the control of the pearl beds in the Christian provinces from the municipalities and placing it under one of the departments of the insular government. These beds should be charted, and one-third of them closed in rotation each year in order satisfactorily to maintain the pearling industry and to give the shells time to mature.

The black bass brought from the United States to Benguet continued to flourish, and fishing for them is now permitted there under regulations compelling the return to the water of all individuals measuring less than 10 inches in length. Black bass have also been successfully transferred to the spawning ponds in the lowlands, where they are alive and in fine condition and will doubtless soon spawn.

Two dozen of the mosquito-eating fish, which have proved valuable in various regions for use in combating mosquitoes, were brought by Mr. Seale from Honolulu in January and placed in one of the laboratory aquaria, where they have multiplied rapidly. Two hundred have been planted in the swamps and fish ponds near Manila and about a hundred remain on hand. It was determined by actual observation that one of these little fish ate 500 mosquito larvæ in 24 hours. It is therefore to be hoped that their generalization in the islands will be valuable.

CHEMISTRY.

In this department of its work the bureau has also been short-handed during the year. The amount of work done has, nevertheless, been somewhat larger than that performed during the previous year. The following table illustrates the growth of the chemical work:

Nature and quantity of chemical work.

Nature of material.	Number of samples tested.			
	1910	1911	1912	1913
Rocks and minerals.....		25	46	12
Soils, fertilizers, cements, clays.....	3,342	3,738	8,636	9,617
Metals and alloys.....	24	46	36	45
Road materials, stone, gravel, sand, and concrete.....		440	248	130
Water.....	82	164	146	197
Calorimeter determinations of fuels.....		29	9	31
Boiler tests of coal.....		10	2	
Standardizations of weights and measures (sets).....		1,066	990	1,137
Coal analyses.....		154	20	58
Paint.....				46
Miscellaneous ¹	248		248	91
Total.....	3,696	5,672	10,381	11,354

¹ Work classified under "Miscellaneous" 1910 is largely segregated in 1911, 1912, and 1913.

CEMENT TESTING.

The number of samples of cement submitted for physical testing increased from 7,966 for 1912 to 9,617 for 1913. The adoption of the new cement specifications has increased the work involved in making tests by about 50 per cent. Samples have come in very irregularly. Sometimes 800 or 900 are received in two or three days, and then will follow a period of weeks when few, if any, come in. The sudden submitting of a very large number of samples is often followed by complaints that the laboratory does not do work promptly. If we maintained a force sufficiently large immediately to dispatch a volume of work like this it would necessarily be idle much of the year. The capacity of the laboratory has been increased and will soon reach 65 samples per day, or 16,250 per year of 250 workdays. With a little more care and judgment on the part of those who submit cements for testing, the temporary swamping of the working force can readily be avoided.

THE TESTING OF ROAD MATERIALS.

There is a growing interest in the testing of road materials. Formerly it was customary to request only an abrasion test. Now engineers demand tests of hardness, toughness, cementive value and fracture, ask for classification, and are also giving consideration to the chemical and physical properties of tars, asphalts, bitumens, and oils intended for use on the roads.

ABSTRACT RESEARCH PROBLEMS.

A very large number of abstract problems involving chemical research has been submitted to the bureau. In many instances their solution has made it necessary to devise satisfactory new methods of analysis. The more important of these problems are listed in the

report of the bureau of science, and their variety and complexity are worthy of note.

The subject of the corrosion of metallic surfaces exposed to the climate, and of coatings intended to protect them, is of peculiar importance here. Large sums have been lost through the rapid deterioration of metallic structural materials, although covered by protective coatings which apparently give good results in other parts of the world. The bureau has been in active correspondence with manufacturers as well as with local users of such materials, and is investigating the value of Philippine vegetable oils, gums, and resins in this connection.

Some samples of galvanized-iron roofing corrode very rapidly; others last for many years with little apparent deterioration. The cause of this difference should be ascertained.

Samples of soft rock from Nueva Ecija, submitted by the bureau of public works for valuation as a road material, proved to be hardened clay, from which the bureau of science made very good vitrified brick.

The investigation of raw materials to determine their suitability for the manufacture of lime, hydraulic, Roman, and Portland cement, and sand-lime brick has been continued, and materials which have proved theoretically satisfactory will be subjected to the conditions of actual manufacture in a new limekiln of 500 pounds capacity which has just been completed.

ASSAY WORK.

Although private assay offices have been installed at the Colorado Mine, Masbate, and the Headwaters Mine, Benguet, and although a number of quartz prospectors have transferred their attention to placer deposits, the number of assays performed by the bureau continues to increase.

PRIVATE DEMAND FOR SERVICES OF GEOLOGISTS.

There has been a continued demand for the services of the geologists of the bureau for the making of field investigations of a strictly economic nature desired by private individuals and corporations. The bureau employees are practically the only men available in the Philippines for this work. All such investigations actually undertaken have been carried on to discover the economic possibilities of various deposits and thereby to aid in advancing the mining industry.

LIBRARY.

Excellent progress has been made toward the permanent organization of the library and in the improvement of methods of routine library work. It has been facilitated by moving into the new quarters which afford room for shelving books promptly. Well-lighted stacks conveniently situated with reference to the charging desk reduce the labor heretofore required in connection with books taken out and returned and enable the assistant in charge actively to engage in other work.

Three thousand eight hundred and fifty-two bound volumes were added to the library. Of these 1,690 resulted from the binding of publications already on hand, while 2,162 were new accessions.

All new material has been classified promptly upon its receipt, and unclassified material of a miscellaneous character has been reduced in amount. There is little unclassified scientific material remaining. The better-trained Filipino assistants are showing great interest in the subject of classification and are becoming very helpful in this branch of the work.

PHOTOGRAPHS.

The invaluable collection of Government photographic negatives, which now includes 16,200 5 by 7-inch and 1,250 8 by 10-inch negatives, has been moved into the library and has been placed in a readily accessible location in order to give it more adequate protection against fire.

CUTS.

The bureau of science collection of cuts numbering some 3,800 has been carefully identified by comparison with the prints, and numbered with steel dies in such a way that this record can not be lost.

RESERVE STOCK OF THE PHILIPPINE JOURNAL OF SCIENCE.

To protect against possible loss by fire, 36 complete sets of the Philippine Journal of Science have been placed in the library as a reserve stock. They are stored in insectproof and waterproof boxes.

USE OF THE LIBRARY.

The use of the library steadily increases. It is now open during longer hours than heretofore. Its tables accommodate comfortably 25 to 30 readers and there is space for an additional table to accommodate ten or a dozen more.

POWER PLANT.

Probably few residents of Manila, even, realize the size of the power plant of the bureau of science and the manifold uses to which it is put. It supplies not only the bureau of science building but the Philippine General Hospital buildings and the College of Medicine and Surgery with electric current for operating incandescent and arc lights, fans, refrigerating machines, ice machines; also for the operation of air compressors, vacuum pumps, motor used in ventilation and water circulation systems; ore crushers, pulverizers, and grinders; water pumps; gas scrubbers; centrifuges; testing apparatus for road material; electric elevators; X-ray apparatus, radiographic apparatus, pantostat, cauterizers, radiometer, keratometer, ozonizers, electric furnaces, and incubators; ultra-violet light sterilizing apparatus; liquid-air machine; electric annunciators; induction

coils; ultra-violet photomicrographical apparatus; current for charging electric ambulances, automobiles, storage batteries, etc.; live steam for operating steam tables, urns, boilers, and kettles; hot-air baths; autoclaves; pumps, engines; automatic stills, hot-water tanks, etc., and gas for students' and laboratory burners, gas stoves, and gas engines.

The installation of a new 75-horsepower boiler has increased the boiler capacity to 225 horsepower in one battery of three 75-horsepower boilers.

With the installation of a producer gas engine driven dynamo, the total rated capacity of the electric generators in the engine room is 125 kilowatts. The most economical operation of any electrical generating unit is to run at its record capacity. The acting director of the bureau has displayed great ingenuity in so adjusting the work for the 24 hours that this may be done. The charging of electric ambulances and automobiles, of storage batteries, etc., is carried on when the load resulting from other work is comparatively light.

PRODUCER GAS PLANT.

The new producer gas plant is a great success. The dynamo driven by the gas engine is unquestionably far more economical as a power producer than are the units driven by steam. Exact figures of the cost of the power furnished by this plant are in preparation.

PUBLICATION.

An immense amount of valuable material has been published in the Philippine Journal of Science. A list of the papers there issued will be found in the report of the Acting Director of the Bureau of Science. The largest single publication issued during the year is "The Flora of Manila," a book of 490 pages. It is of especial value to teachers and students of botany, as it gives in compact form means of determining most of the common plants to be found in and about the towns of the Philippines. It must, I think, be considered the most generally useful botanical publication yet issued by the bureau.

There has been a 30 per cent increase in paid subscriptions for the Philippine Journal of Science during the year. This demonstrates the increasing appreciation in which the Journal is held.

In this brief review of the work of the Bureau of Science I have necessarily left without so much as mention many of its important phases. They are, however, fully described in the report of the acting director and I recommend as of especial interest and importance what is there said relative to the Iloilo sugar testing laboratory and the sugar mills in the Visayan Islands. The great financial importance of chemical control of sugar mills is very fully demonstrated.

An especially interesting and important feature of this report is a past history of the development of the bureau and a summary of the more important results which it has accomplished up to the present time.

THE WEATHER BUREAU.

CHANGES IN PERSONNEL.

Father George M. Zwack, who for nearly 10 years has served most acceptably as secretary of the weather bureau, was obliged by increasing ill health to retire. His place has been filled by Father Robert E. Brown, who was an officer of the bureau from 1902 until 1907, but during the past six years has been studying in England, France, and Germany.

The director of the bureau, Father José Algué, returned to the Islands on November 15, 1912, after an absence of somewhat more than six months. He had been compelled to leave the islands by ill health, but had improved the opportunity afforded by taking this leave to visit England, Cuba, and the United States in order to adapt his famous barocyclonometer to use in the North Atlantic. He succeeded in doing this, thus rendering a great service to vessels exposed to the danger of encountering the West Indian hurricanes. Father Algué's barocyclonometer has now been officially adopted by the Navy Department of the United States for use on all the warships of the North Atlantic Squadron.

WORK OF THE CENTRAL OBSERVATORY.

Dissemination of knowledge of weather conditions has been rendered more effective by the daily posting of weather maps in the Ayuntamiento, the customhouse, and at Fort Santiago.

The year has been remarkable for the number and severity of its typhoons, several of which have been very destructive. That of October 19 killed some 400 people in Cebu alone, and inflicted very great property losses. Cebu is seldom visited by typhoons during October and the damage and loss of property were needlessly great because the people paid little attention to the warnings sent to the town by the local observatory.

An innovation has been introduced in the distribution of typhoon warnings at Manila. They are now sent direct by a messenger to shipping firms which are especially interested. This service has been highly appreciated and will be continued. Through the courtesy of the chief signal officer of the Philippines warnings are sent out by wireless from Corregidor so that vessels properly equipped may receive them at sea. Typhoon signals have been established at Zamboanga and the necessary warnings are now telegraphed regularly to that port. One hundred and thirty-one warnings were cabled to foreign observatories as against 122 during the previous year.

SEISMIC DEPARTMENT.

The new seismic station at Ambulong, on the shore of Taal Lake, has been completed, equipped, and opened for work. In 1912 the Philippine Legislature appropriated funds for the purchase of a suitable tract of land, for a reenforced concrete building, and for its equipment with suitable apparatus so as to facilitate the observation of the periods of activity of Taal Volcano with a view to the issuing of

seasonable warnings and the prevention of such loss of life as occurred during the great eruption of 1911. The observatory is well equipped and should prove very useful.

A motor launch has also been provided in order to facilitate visits to the volcano by observatory employees and by the general public, to warn towns around the lake in case of danger, and to aid in removing the inhabitants if necessary.

Were it not for what Father Algué rightly calls "the truly execrable trail, misnamed road, from Tanaun to Ambulong" a large number of tourists would now visit Taal Volcano. If the road were in decent repair the journey could be made from Manila to the volcano and return in one day. This is not now possible. Even the transportation of the instruments to the observatory was rendered difficult and hazardous because of the detestable condition of this road. Immense sums are being spent on road construction elsewhere in the Islands, and it seems inexplicable that this little stretch of road, which would be used by so many people were passage over it not attended with risk of limb if not of life, should be left in its present state of utter neglect, and indeed that a new road should not be constructed.

The year has been one of great seismic activity. Three hundred and ninety-six disturbances were registered, of which no less than 254 pertain to earthquakes originating in or very near to the archipelago. There were 135 earthquakes at a distance of from 1,000 to 5,000 kilometers and 7 originated at a still greater distance, including the great Turkish earthquake and 2 in Alaska. The eastern portion of Mindanao was especially afflicted. The Province of Sorsogon suffered from destructive disturbances which were fortunately confined to limited areas and did not cause loss of life.

On March 14 there was an earthquake of exceedingly great amplitude, lasting for the extraordinary time of two minutes, in Davao, Cotabato, and the Agusan River Valley. From the 18th to the 30th of April a series of earthquakes, numbering 84 in Butuan and 63 in Surigao, greatly alarmed the inhabitants of these regions but no very serious damage was done.

PAYMENT FOR CERTAIN OVERTIME WORK RECOMMENDED.

Father Algué states that it often happens that the chief forecaster and the observers are forced to remain on duty for 10 to 14 hours per day for three or four days in succession. At the present time they receive no compensation for such overwork involving, as it does, considerable strain. Moreover, observers must be on duty on Sundays and on all official holidays. He recommends that a provision of law be enacted similar to the one in force covering overtime in the Customs Service, so that work of this character may be paid for. I concur in this recommendation.

Father Algué calls attention to the fact that the limiting of the hours of the telegraph service to two hours in the morning and two in the afternoon on Sundays and legal holidays often very seriously interferes with the work of the Weather Bureau, as it is frequently impractical to receive and decipher the weather telegrams from the outlying stations, trace the isobars, and study the resultant map in time

to send out warnings before the close of the telegraph office, which may mean a delay of 20 hours in the dispatching of typhoon warnings and may thus seriously endanger life and property. This difficulty would be largely remedied if the hours of service could be prolonged from 7.30 to 10 a. m. and from 2.30 to 5 p. m. I think that this subject should be given serious consideration.

BUREAU OF LANDS.

It has proved practicable materially to increase the number of Filipino employees of this bureau. All vacancies are filled by Filipinos so far as possible. The increase in the proportion of Filipino employees involves increased work of supervision by the Americans in the service, and justifies corresponding increase in the salaries of some of them, as continuity of service on the part of such employees means increased economy and efficiency, because they become more capable of supervising Filipinos as they gain in knowledge of Filipino character through experience.

FRIAR LANDS.

Friar land work has been more satisfactory than during any previous year. Its results as compared with those of the fiscal year ended June 30, 1912, are as follows:

Results of work accomplished on friar estates during the year as compared with the previous year.

Increased area occupied 1 per cent of total area, or hectares.....	1, 545
Number of lots sold increased.....	2, 135
Number of lots leased decreased.....	165
Total number of lots disposed of increased.....	1, 970
Area sold increased..... hectares..	6, 250
Area leased decreased..... do....	1, 627
Total area disposed of increased..... do....	4, 623
Area disposed of increased..... per cent..	2. 8
Value of lots sold increased.....	P 889, 919. 00
Value of lots leased decreased.....	69, 922. 00
Total value of lots disposed of increased.....	819, 997. 00
Annual contracted installments (without interest) increased.....	43, 993. 00
Annual contracted rentals decreased.....	637. 00
Total contracted income (without interest) increased.....	43, 356. 00
Receipts from rents decreased.....	7, 033. 53
Receipts from sales increased.....	162, 127. 12
Receipts from interest increased.....	218, 991. 28
Total receipts from all sources increased.....	373, 549. 27
Administrative expenses decreased.....	19, 138. 21
Irrigation expenses increased.....	11, 656. 59
Total current expenses decreased.....	7, 481. 62

Status at close of year.

	Number.	Area.	Value.
		<i>Hectares.</i>	
Sold land and improvements.....	42,864	91,522	₱14,449,376
Leased land and improvements.....	851	1,598	198,999
Total.....	43,715	96,120	14,648,375
Undisposed of land and improvements, including interest.....	6,605	58,534	4,043,457
Annual contracted rentals.....			₱9,735.00
Annual contracted installments (without interest).....			721,966.00
Annual contracted interest (estimated).....			434,095.00
Total contracted income (interest estimated).....			1,165,796.00
Estimated delinquent installments outstanding.....			300,000.00
Estimated interest on delinquent installments.....			200,000.00
Interest accrued on undisposed land.....			295,621.00
Total receipts from all sources for the year.....			1,203,551.70
Possible receipts for the fiscal year 1914 provided all collections are made.....			1,665,000.00

Of the 42,864 friar land lots thus far sold, 4,450 lots, with an area of 5,200 hectares, or 5.4 per cent of the total area sold, valued at ₱336,448, have been paid for in full. There will, therefore, be no further income from these lots and deeds have been, or soon will be, issued to the purchasers.

The number of estates on which the collections for the year exceeded the total current expenses, including interest, was 19 as compared with 14 for the previous year.

The surplus for the year of receipts over expenses was ₱549,964.83 as compared with ₱168,983.94 for the previous year.

The great typhoon which wrecked the city of Cebu and the plague of locusts in the island of the same name greatly interfered with the collections on the two Cebu estates. In fact, almost nothing was collected, and no effort was made to enforce collections on account of the distressing conditions which prevailed.

On the other estates harvests as a rule have been abundant, and purchasers have for the most part made every effort to pay their installments.

The following tables show in summary form the work accomplished during the year on each of the several estates.

Statement showing progress of friar estates during fiscal year ended June 30, 1913.

Estate.	Areas. Hectares.	Estimated occupied.	Disposed of.				Total.		
			By sale.		By lease.		Lots.	Area.	Per cent. Hectares.
			Lots.	Area. Per cent.	Area. Per cent.	Lots.			
Panilad.....	1,872	75.0	788	28.0	.....	364	.....	.....	.....
Dinagbag.....	1,282	64.0	465	33.7	.....	.....	.....	.....	.....
Bifian.....	3,384	60.5	3,090	99.4	.....	.....	.....	.....	.....
Calamba.....	13,015	58.6	2,386	58.5	.....	.....	.....	.....	.....
Dampol.....	927	89.9	372	89.9	.....	9	.....	.....	.....
Guiguinto.....	930	100.0	684	100.0	.....	.....	.....	.....	.....
Imus.....	17,165	47.7	5,707	47.0	.....	49	.....	.....	.....
Isabela.....	19,507	3.3	93	3.3	.....	.....	.....	.....	.....
Lolombo.....	5,020	82.0	4,238	79.2	.....	.....	.....	.....	.....
Malinta.....	3,515	98.0	1,450	97.8	.....	92	.....	.....	.....
Matamo.....	12	100.0	1	100.0	.....	.....	.....	.....	.....
Muntinlupa.....	2,819	73.1	1,364	73.1	.....	.....	.....	.....	.....
Naic.....	7,271	60.2	2,003	59.3	.....	31	.....	.....	.....
Orion.....	954	96.0	648	96.0	.....	.....	.....	.....	.....
Piedad.....	3,813	83.5	778	83.1	.....	6	.....	.....	.....
San Francisco de Malabon.....	11,134	55.6	2,944	55.6	.....	2	.....	.....	.....
San Jose.....	22,485	100.0	2	100.0	.....	.....	.....	.....	.....
San Marcos.....	87	100.0	2	100.0	.....	.....	.....	.....	.....
Santa Cruz de Malabon.....	9,559	40.0	1,848	35.6	.....	34	.....	.....	.....
Santa Maria de Pandi.....	10,157	85.0	4,255	79.0	.....	241	.....	.....	.....
Santa Rosa.....	5,416	95.6	2,240	95.6	.....	.....	.....	.....	.....
Tala.....	6,992	100.0	1,117	100.0	.....	.....	.....	.....	.....
Talsay-Minglanilla.....	8,158	32.0	6,389	31.0	.....	23	.....	.....	.....
Total.....	154,654	62.5	42,864	61.1	.....	851	.....	.....	.....
Total previous year.....	154,478	61.5	40,729	57.2	.....	1,016	.....	.....	.....

NOTE.—Increase in total areas due to purchase of Bifian and Santa Rosa detached parcels.

Estate.	Areas.	Estimated occupied.	Annual contracted receipts, excluding interest on deferred payments.			Receipts for fiscal year.					
			From rents.	From sales.	Total.	Rents.	Sales.	Interest on deferred payments.	Recovery of costs in court cases.	Miscellaneous; grazing, timber, and stone permits; sale of old timber.	Total receipts.
	<i>Hectares.</i>	<i>Per cent.</i>									
Banilad.....	1,872	75.0	P 1,670.00	P 10,192.00	P 11,862.00	P 601.50	P 5,909.36	P 3,225.20			P 9,736.06
Bingag.....	252	94.0		2,517.00	2,517.00	20.00	3,356.00	588.89			3,964.89
Britan.....	3,564	99.5		36,989.00	36,989.00		40,331.58	19,831.58	P 30.00	P 10.84	60,204.00
Calamba.....	13,015	56.6	125.00	64,399.00	64,524.00	166.00	55,090.00	33,244.52	44.00	1,211.89	89,756.41
Dampol.....	927	99.9		8,921.00	8,921.00	1.98	8,765.47	6,347.74	14.00		15,129.19
Guiguinto.....	930	100.0		9,174.00	9,174.00		10,059.00	6,285.97			16,344.97
Imus.....	17,165	47.7	1,129.00	99,700.00	100,829.00	1,420.72	135,207.00	98,440.95	136.00	786.00	236,390.67
Isabela.....	19,507	3									
Lolombay.....	5,090	82.0	1,537.00	62,627.00	64,164.00	986.00	78,012.81	52,658.12	142.00	1.25	131,800.18
Malinta.....	3,515	98.0		27,962.00	27,962.00	490.00	42,328.00	29,368.15	31.00		72,217.15
Matamo.....	12	100.0		122.00	122.00		122.00	87.84			209.84
Muntinlupa.....	2,819	73.1		5,048.00	5,048.00		4,660.92	1,957.94	42.00		6,660.86
Nalc.....	7,271	60.2	441.00	41,049.00	41,490.00	284.00	32,358.20	21,292.44			54,556.64
Orton.....	954	96.0		8,524.00	8,524.00		9,903.58	3,013.08			12,916.66
Piedad.....	3,813	83.5	148.00	22,554.00	22,702.00	521.00	21,309.00	13,636.63			35,466.63
San Francisco de Malabon.....	11,134	55.6	4.00	48,757.00	48,761.00	177.00	52,402.20	35,379.55	188.00	442.00	88,588.75
San Jose.....	22,485	100.0		29,846.00	29,846.00		29,846.00	19,167.73			49,013.73
San Marcos.....	87	100.0		585.00	585.00		585.60	452.49			1,038.09
Santa Cruz de Malabon.....	9,559	40.0	696.00	39,468.00	40,164.00	199.00	26,786.00	20,992.15	240.00	16.00	48,233.15
Santa Maria de Pandi.....	10,157	85.0	2,692.00	66,502.00	69,194.00	4,105.50	57,058.21	54,187.36	132.00	18.15	143,601.22
Santa Rosa.....	5,416	85.6		56,296.00	56,296.00		52,674.00	30,159.62	18.00		82,851.62
Tala.....	6,992	100.0		16,715.00	16,715.00	251.60	22,238.17	13,351.32	160.00		36,001.69
Talisay-Minglanilla.....	8,158	32.0	1,293.00	64,039.00	65,332.00	21.00	4,263.00	2,894.32		10.98	7,189.30
Total.....	154,654	62.5	9,735.00	721,966.00	731,701.00	9,645.30	723,246.10	466,564.19	1,233.00	2,863.11	1,203,551.70
Total previous year.....	154,478	61.5	10,372.00	677,973.00	688,345.00	16,678.83	561,118.98	247,572.91	447.99	4,183.72	830,002.43

Statement showing progress of friar estates during fiscal year ended June 30, 1913—Continued.

Estates.	Areas.	Estimated occupied.	Current expenses.				Deficit fiscal year 1913, each estate.	Surplus fiscal year 1913, each estate.	Extraordinary current expenses: Surveys, preparation, plans, and descriptions.	Road construction.
			Annual interest on purchase price at 4 per cent.	Administration.	Irrigation maintenance and repairs.	Total.				
	<i>Hectares.</i>	<i>Per cent.</i>								
Banilad.....	1,872	75.0	P8,749.98	P1,009.61		P9,759.59	P23.53		P7.72	
Binagbag.....	1,262	94.0	1,434.91	85.21		1,520.12		P2,444.77		
Bifian.....	3,504	98.5	24,063.33	2,632.12	P1,812.63	28,528.08		31,675.92	583.00	
Campala.....	13,015	56.6	53,417.73	6,463.61	1,943.79	63,825.13		25,931.28	1,382.36	
Dampol.....	927	99.9	6,025.90	709.56		6,735.46		8,393.73	10.71	
Guinguito.....	930	100.0	6,222.72	721.17		6,943.89		9,401.08	5.52	
Imus.....	17,165	47.7	82,880.97	9,925.62	7,433.46	100,240.05		136,150.62	75.47	
Isabela.....	19,507	3	12,788.64	1,534.11		14,322.75			11.72	
Lolomboy.....	5,020	82.0	38,929.65	4,629.27		44,920.20		86,879.98	35.33	
Malinta.....	3,515	98.0	17,616.85	2,150.33	1,361.28	19,767.18		52,449.97	16.44	
Matano.....	12	100.0	67.29	6.56		73.85		135.99	.05	
Muntinlupa.....	2,819	73.1	3,507.08	458.92		3,966.00		2,694.86	3.51	
Nalc.....	7,271	60.2	39,308.46	4,138.07	4,161.42	47,607.95		6,748.69	31.47	
Orton.....	964	96.0	3,922.01	439.24		4,361.25		8,555.41	12.92	
Piedad.....	3,813	83.5	13,213.74	1,665.17		14,878.91		20,587.72	12.73	
San Francisco de Malabon.....	11,134	55.6	42,794.99	5,401.81		58,433.96		30,154.79	40.64	P3,225.75
San Jose.....	22,485	100.0	23,902.57	2,635.18		26,537.75		22,455.98	20.29	
San Marcos.....	87	100.0	402.99	52.47		545.46		472.63	40	
Santa Cruz de Malabon.....	9,559	40.0	41,496.50	4,884.47	3,591.13	49,972.10			37.18	
Santa Maria de Pandi.....	10,157	85.0	42,185.49	5,338.50		48,002.63		97,498.50	40.79	
Santa Rosa.....	5,416	95.6	36,409.39	4,162.01	2,192.11	42,763.51		40,088.11	3,433.59	
Tala.....	6,992	100.0	8,694.35	1,147.28		9,841.63		26,160.06	8.77	824.49
Talassy-Minglanilla.....	8,158	32.0	44,311.48	5,666.84	41.10	50,019.42		42,830.12	43.00	
Total.....	154,654	62.5	554,437.02	65,897.22	33,252.63	653,586.87		58,915.35	{698,880.18 549,964.83}	5,814.25
Total previous year.....	154,478	61.5	554,437.02	85,065.43	21,596.04	661,068.49		151,226.60	{3'0,160.54 1168,933.94}	147.21

1 Net surplus.

NOTE.—Increased areas due to purchase of Bifian and Santa Rosa detached parcels.

A comparison of these tables with the corresponding ones for previous years results favorably with the following apparent exceptions:

There has been a decrease in the number of lots and area leased on four estates. This is due to the fact that holders of permanent leases have requested to have them canceled and sale certificates issued to them for the corresponding lands, and the decrease in the area leased is compensated for by a corresponding increase in the area sold.

On the Piedad and Tala estates all temporary leases expired, the occupants of the land having purchased or agreed to purchase their holdings. It, of course, follows that there has been a corresponding decrease in the annual contracted rentals and that there will be an equivalent increase in the contracted income from sales.

The annual contracted income from sales also decreases as sales are completed and the payment of installments of the purchase prices ends.

On the Biñan, Santa Rosa, Calamba, and Muntinlupa estates the receipts for the previous year included a considerable amount of delinquencies, while those for the year just ended include practically only the amounts due during that period.

Decrease in income from the Matamo, San Jose, and San Marcos estates is due to the lesser amounts of interest accumulating on unpaid balances which naturally decrease annually.

Subdivisional surveys and plans of detached parcels of the Santa Rosa and Biñan estates purchased during the year have led to increase in nonrecurrent expenditures for these purposes. Other nonrecurrent expenses have been practically eliminated. No expenditures have been made for the construction of irrigation ditches and the repairs made have been of a minor nature.

ADMINISTRATIVE EXPENSES ON ESTATES.

The general administrative expenses have been decreased 22.5 per cent and from ₱85,000 to ₱65,900, through further reduction in and consolidation of office forces.

The cost of irrigation maintenance and minor repairs rose from ₱21,600 to ₱33,300, due to the increased amount of repairs that have been necessary to the irrigation systems during the year.

SALE OF ESTATES.

That portion of the Banilad estate which has heretofore been held pending the decision of the military authorities as to whether or not an Army post should be located thereon is still being withheld from sale pending a resolution of the burnt area committee of the city of Cebu as to whether it will take this land over in whole or in part. Should it not desire to do so, we anticipate that the entire area can be sold within a few months at any time.

The order of the Secretary of War restricting the sale of land on friar estates in accordance with the provisions of the public land act relative to sale of public land is still in force, and has resulted in the frequent declination of sales which would otherwise have been made. I again urge the revocation of this order and reiterate the reasons therefor given in my last annual report.

There is a large area on the Talisay estate in Cebu which is practically worthless for agricultural purposes. The director of lands is of the opinion that it should be planted with useful trees and converted into a forest reserve. It would thus eventually become a source of revenue, as there are at present no forests remaining in the vicinity of Cebu. I concur with him as to the wisdom of this procedure.

The vast areas of unoccupied land on the estates situated in Cavite and Laguna Provinces will for the most part probably remain vacant for many years unless existing restrictions on sales are removed, although if a large sum of money were spent on roadways through these estates it would assist in the sale of their lands, and any agricultural land which can be brought under irrigation and is not entirely without means of communication will also meet with a ready sale.

DELINQUENCES.

Collections during the year have been better than ever before, but owing to the severe drought of the previous year and the suspension of payments then granted on estates which suffered especially from it, a considerable number of tenants have been unable to make the two years' payments due, so that at the present time there is quite a large delinquent list. With the exception of the tenants of the Santa Cruz de Malabon and the Calamba estates, the tenants have apparently made every effort to satisfy their obligations. On the two estates in question there are delinquencies amounting to approximately ₱80,000. Three hundred and forty-six suits were filed against the delinquents on the Santa Cruz de Malabon estate in June, and it is believed that the enforcement of executions against these tenants will produce the desired result.

The following table shows the present status of suits before justice of the peace courts and the court of first instance for nonpayment of rents and installments of purchase price:

Estate.	Pending July 1, 1912.	Filed fis- cal year 1913.	Comprom- ised fis- cal year 1913.	Execu- tions fis- cal year 1913.	Pending June 30, 1913.
JUSTICE OF THE PEACE COURTS.					
Banilad.....	137	9	.....	.....	146
Bifan.....	.....	28	15	.....	13
Calamba.....	.....	90	22	66	2
Dampol.....	.....	14	10	4	.....
Imus.....	2	223	68	.....	157
Lolomboy.....	.....	117	71	.....	46
Malinta.....	.....	23	13	7	3
Muntinlupa.....	.....	32	19	13	.....
Naic.....	.....	109	27	.....	82
Piedad.....	.....	3	3	.....	.....
San Francisco de Malabon.....	.....	158	90	.....	68
Santa Cruz de Malabon.....	.....	346	127	.....	219
Santa Maria de Pandi.....	7	100	67	1	39
Santa Rosa.....	.....	38	9	29	.....
Tala.....	1	80	80	.....	1
Talisay.....	37	.....	37	.....	.....
Total.....	184	1,370	658	120	776
COURTS OF FIRST INSTANCE.					
Calamba.....	1	.....	.....	.....	1
Orion.....	2	.....	.....	2	.....
Total.....	3	.....	.....	2	1

REGISTRATION OF ESTATES.

Titles to 20 out of the 23 friar estates have been adjudicated in favor of the government of the Philippine Islands and the three remaining cases are now in the land court pending adjudication.

NEW PURCHASES OF FRIAR LANDS.

When the original purchase of the friar estates was made the Philippines Sugar Estates Development Co. reserved certain tracts of land on the Santa Rosa and Binan estates for its own use. There has been more or less constant agitation among the tenants concerned for the purchase by the government of these tracts and for their sale to the tenants under the provisions of the friar lands act (No. 1120). The Philippine Legislature by Act No. 2234 authorized the purchase of these lands, together with the buildings and machinery thereon, and their sale to the tenants in accordance with the provisions of act 1120. The purchase was made at a cost of ₱90,000. Of the 354 parcels thus secured 147 were immediately disposed of, as were a rice mill and a small camarin and dwelling house. The large hacienda house will be occupied for some years to come as an office for the friar-land estates agent in Laguna Province, and it is believed that the remaining parcels of land will be sold within a very short time.

FRIAR LAND LOANS.

At the close of the year there were outstanding 28 friar-land loans aggregating ₱33,400. Interest on loans has accrued to the amount of ₱19,885.92, which had been added to the friar land loan fund. The following table shows the purpose for which outstanding loans were made:

Statement showing purposes for which friar land loans were made.

No.	Amount of loan.	Cultivation of sugar.	Purchase of cattle.	Purchase of sugar mills.
		<i>Hectares.</i>		
23	₱25,850	421	-----	
1	2,400	30	----- 2	1
1	1,950	27	----- 1	1
1	1,500	32	----- 8	1
2	1,700	32	10	
28	33,400	542	20	3

OUTLOOK FOR THE COMING YEAR.

A good crop has been harvested on most friar lands during the past year and it is believed that delinquencies will for the most part be made up in the near future and that collections for the coming year will exceed those for the year just ended.

THE SAN LAZARO ESTATE.

On the San Lazaro estate within the limits of the city of Manila the policy of filling lowlands has been steadily continued and it should be persisted in until all the low and undrained lands have been filled.

On this estate there were 2,218 occupied lots and 87 vacant lots at the end of the year. The total contracted income remains substantially unchanged. The delinquent outstanding rentals have materially increased, amounting to ₱9,747.25. This is due in part to a disastrous fire which destroyed the homes of many of the tenants and made it seem inexpedient to insist upon the collection of rentals from them until they had had time to recover from this calamity.

Action has now been had by the Legislature authorizing long-term leases on this estate under certain conditions, and it is anticipated that as a result the income from it will materially increase. This act further provides that leases for the lands of the San Lazaro estate shall be subject to a reappraisal of the value of the lands covered thereby at the expiration of each period of 10 years during the term thereof, said reappraisal to be made by the city assessor and collector of Manila in such manner as lands of private ownership are appraised for the purpose of taxation, the annual rental for each parcel to be adjusted at the rate of 5 per cent of the reappraised value of the land. The first reappraisal has been requested and considerable progress has been made upon it. It is believed that it will result in a material increase in the total appraised rental and a corresponding increase in receipts.

PUBLIC LANDS.

There has been some increase of activity in the purchase, lease, and homesteading of public lands, as is shown by the following table:

Comparison of applications and areas for public land for the fiscal years 1912-13.

	Fiscal year—			
	1912		1913	
	Number.	Area.	Number.	Area.
Homesteads.....	3,105	<i>Ha. a. c.</i> 36,962 98 07	4,468	<i>Ha. a. c.</i> 56,172 40 37
Sales.....	180	8,269 98 12	289	6,403 37 01
Leases.....	112	37,392 32 24	119	22,160 56 22
Total.....	3,397	82,625 28 43	4,876	84,736 33 60

In other words, there is an increase of 43½ per cent in the number of applications received, although the area covered by these applications has increased only a fraction of 1 per cent. This has been due to the fact that many of the new sale and lease applications have covered small areas rather than the maximum areas allowed by law. The increase in the number of applications for public lands is believed to be due chiefly to two causes: (1) The increase in the number of

public-land inspectors who are demonstrating to ignorant people throughout the provinces the methods which they should employ to obtain public lands; (2) good crops in most of the provinces so that small farmers have means with which to increase their holdings.

HOMESTEADS.

The increase in the number of homestead applications is particularly satisfactory and is believed to be very directly due to the efforts of the traveling public-land inspectors. Furthermore, homesteaders are now obtaining better protection in the courts than they previously had. The bureau of lands has repeatedly loaned its attorneys to homesteaders not only for the protection of their rights, but to save the public domain from registration in the land court as private property through sharp practices by attorneys and others.

There should be a still further increase in the number of public-land inspectors, not only for the purpose of instructing the common people as to their rights under the public-land act, but to reduce the area of public land which is annually registered under the Torrens law by private persons who have no legal right to it.

The number of persons delinquent in the payment of installments on their homesteads continues discouragingly large, and a further unfortunate feature is that nearly 20 per cent of applications on which final proofs have been presented must be canceled, as the testimony shows that the law has not been complied with.

It is a regrettable fact that municipal presidentes and concejales have been more or less active in preventing homestead entrymen from cultivating their land, but in nearly all such cases which have come to the knowledge of the bureau the matter has been settled without appeal to the courts. In 10 cases involving 34 homesteads where the land was claimed by private individuals the government successfully opposed the attempts of the latter to establish their claim thereto, thus saving the land for the homesteaders and securing for itself the returns from 500 hectares of public land. A municipal council in Occidental Negros filed a protest against three homesteaders because they were unknown in the municipality, stating that the municipality desired to retain all the public land within its limits for its residents and that nonresidents had no right to file applications therefor.

An important decision has been rendered by the court of land registration to the effect that the makers of cañingins, the destructive forest clearings which cause such damage, gain no title to the land covered by their operations.

The following tables give the details of homesteads, sales, and leases:

Detailed statement covering homestead applications received under the provisions of Chapter I of the public land act (No. 926) during the period from July 26, 1904, to and including June 30, 1913, showing the status of same June 30, 1913.

Province.	Applications received		Pending correction.		Rejected, canceled, withdrawn.		Pending report from forestry bureau.		Pending receipt of fee.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
Agusan.....	19	Ha. 277 65 15	1	Ha. 15 13 95	1	Ha. 15 13 95	7	Ha. 105 97 65	22	Ha. 200 29 90
Albay.....	232	2,112 23 26	14	127 46 50	49	11 100 14 95	11	100 14 95	54	751 21 25
Ambos Camarines.....	872	12,140 73 63	40	556 45 60	376	5,030 68 64	51	709 48 14	3	60 80 80
Antique.....	200	2,541 93 89	13	158 33 58	54	6,657 69 58	33	401 92 68	40	541 86 80
Bataan.....	484	6,556 59 19	18	243 84 06	88	1,192 10 96	142	2,923 53 14		
Batanes.....	67	793 14 31	4	43 13 04	2	29 05 22	60	704 96 08		
Batangas.....	3	21 61 55					2	21 60 00	1	1 00 95
Bohol.....	4	37 29 24					2	22 69 24		
Bulacan.....	58	792 25 10	16	218 55 20	7	10 00 00	14	190 63 30	15	204 29 25
Cagayan.....	517	7,373 04 79	22	313 74 80	38	95 61 65	130	2,853 93 00	15	213 91 50
Capiz.....	269	3,580 21 95	10	144 24 70	123	1,774 13 81	16	230 79 73	11	158 67 17
Cebu.....	59	5,592 36 94	5	50 20 10	40	401 60 80	5	50 20 10		
Iloos Norte.....	438	5,672 24 95	41	530 96 64	52	673 42 08	90	2,165 53 60	62	802 92 48
Iloos Sur.....	433	5,919 20 61	24	328 08 48	141	1,927 49 82	35	478 45 70	20	273 40 40
Iloilo.....	113	1,565 57 61	3	40 59 05	56	676 25 60	6	81 18 10	1	13 86 35
Isabela.....	782	8,268 49 38	12	142 27 32	176	2,086 67 36	55	652 08 55	3	367 53 91
Laguna.....	154	1,879 73 75	6	73 23 66	87	1,061 93 07	33	402 80 13	3	36 61 83
Leyte.....	205	2,702 84 84	6	79 10 76	59	777 89 14	14	184 58 44	13	171 39 98
Mindoro.....	992	14,109 13 44	36	512 02 80	136	1,934 32 60	150	3,133 45 40	64	900 27 20
Misamis.....	32	321 67 75			7	69 53 60	10	100 52 00	1	10 05 24
Moro.....	707	8,860 85 13	80	1,002 64 00	69	864 77 70	195	3,443 93 50	120	1,503 96 00
Mountain.....	114	1,461 47 90	35	448 69 65	14	179 47 86	27	3,443 13 73	12	1,583 83 85
Negros Occidental.....	1,149	16,590 21 10	32	489 89 12	508	7,579 02 28	61	933 85 51	102	1,561 52 82
Negros Oriental.....	53	243 41 26	7	32 14 89	23	105 63 21				
Nueva Ecija.....	4,110	56,079 28 54	155	2,061 34 50	822	1,337 37 58				
Nueva Vizcaya.....	175	881 06 43	34	120 85 68						
Palawan.....	228	2,408 41 17	61	649 51 58	23	244 80 94	111	9,969 29 25	479	6,394 22 10
Pampanga.....	45	870 04 76	2	26 77 06	13	174 00 89	54	1,574 98 12	18	191 66 04
Pangasinan.....	953	10,931 52 19	68	779 92 66	249	6,327 50 96	173	2,084 22 35	2	26 77 06
Rizal.....	394	5,439 22 19	8	110 44 16	40	838 31 20	65	897 33 80	63	4,415 75 75
Samar.....	7	78 79 50	2	22 51 28	3	33 76 82			1	11 25 64
Sarangani.....	1,077	14,268 86 13	33	437 17 74	236	2,026 48 08	120	2,589 73 60	107	1,417 51 46
Sorsogon.....	43	577 86 00			9	120 94 92	2	26 87 76	1	13 43 88
Tarlac.....	947	12,283 01 89	37	468 90 83	202	2,620 04 10	149	1,932 60 45	148	1,919 61 40
Tayabas.....	2,905	32,271 08 68	157	1,744 11 30	664	7,176 37 60	683	7,587 44 70	146	1,621 91 40
Union.....	227	2,395 52 46	36	379 88 44	28	296 48 32	45	474 88 05	16	168 84 64
Zambales.....	228	2,012 45 63	10	123 35 40	52	641 34 08	63	777 13 02	1	12 33 54
Total.....	19,313	245,369 73 39	1,018	12,475 58 47	4,470	49,967 14 64	3,333	50,785 91 23	1,636	21,285 65 93

REPORT OF THE PHILIPPINE COMMISSION.

Entries.

Province.	Allowed.		Contested.		Canceled.		Patents issued.		Surveyed.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
Agusan.....	10	Ha. a. c. 159 39 50		Ha. a. c. 9 10 45		Ha. a. c. 9 10 45		Ha. a. c. 9 10 45		Ha. a. c. 9 10 45
Albay.....	135	1,229 10 75			1	278 22 80				
Ambos Camarines.....	319	4,437 73 66	12	166 93 68	20	24 35 92				
Antique.....	93	1,132 70 28			2	67 73 35				
Bataan.....	189	2,569 32 63			5		2	13 12 49		
Batanes.....	1	16 00 00								
Batangas.....										
Bohol.....	1	4 60 00								
Bulacan.....	6	81 95 70			1	100 03 70				
Cagayan.....	302	3,454 62 20			7	14 42 47			3	42 58 30
Capiz.....	108	1,557 86 76			1	20 08 04				
Cebu.....	3	30 12 06			2	64 75 20			2	20 08 04
Iloos Norte.....	174	2,268 36 96	5	64 75 20	5	150 37 22			6	77 70 24
Iloos Sur.....	186	2,666 68 90	2	27 34 04	11	13 86 35			5	68 35 10
Iloilo.....	46	638 72 10			1	237 12 20				
Isabela.....	480	5,690 89 80	1	12 20 61	20	24 41 22			5	59 28 05
Laguna.....	21	256 32 81			2				1	12 20 61
LeYTE.....	113	1,489 85 98								
Mindoro.....	589	8,377 34 70			6	85 33 80			8	170 67 60
Misamis.....	14	1,140 73 36								
Moro.....	241	3,020 45 30			2	25 06 60				
Mountain.....	25	326 49 75			1	15 30 91				
Negros Occidental.....	445	6,267 54 95			1	13 77 81				
Negros Oriental.....	20	91 85 40			3	1,595 88 00				
Nueva Ecija.....	1,695	22,691 90 50	3	39 89 70	120	10 07 14			92	1,224 50 80
Nueva Vizcaya.....	36	181 20 52			2	181 01 26				
Palawan.....	29	398 78 62			17	26 77 06			24	255 54 72
Pampanga.....	32	428 32 96	1	13 38 53	2	137 63 40			1	11 46 95
Pangasinan.....	385	4,415 75 75	2	22 93 90	12	193 27 28			3	41 41 56
Rizal.....	181	2,498 74 12	1	13 80 52	14					
Samar.....	1	11 25 64								
Sorsogon.....	529	6,018 08 62	22	291 45 16	27	357 69 06			3	39 74 34
Surigao.....	27	332 84 76			4	53 75 52				
Tarlac.....	377	4,889 87 85	1	12 97 05	23	298 32 15			5	64 75 25
Tayabas.....	1,220	13,552 98 00	1	11 10 90	23	255 50 70			11	122 19 90
Union.....	101	1,065 84 29							1	10 55 29
Zambales.....	82	1,011 50 28			7	86 34 78			10	123 35 40
Total.....	8,225	103,273 94 46	51	676 79 29	341	4,347 06 38	58	213 22 83	180	2,344 42 16

Detailed statement covering sales applications received under the provisions of Chapter II of the public land act (No. 926) during the period from July 1, 1912, to and including June 30, 1913, showing the status of same June 30, 1913.

Province.	Applications received.		Rejected, canceled, withdrawn.		Pending action.		Pending report from forestry bureau.		Sales accomplished.		Amount received.	Balance due.	Amount of sale.	Patents issued.	
	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.				Num-ber.	Area.
Aruian.	3	Ha. a. c. 38 71 00		Ha. a. c. 12 96 00	1		Ha. a. c. 25 75 00		Ha. a. c. 4 40 00						
Albay.	1	15 97 05					15 97 05								
Ambo. Camarines.	1	4 40 00							1	16 03 73	725 00	736 60	731 60		
Antique.	2	16 03 73							2		185 04	550 12	715 16		
Bataan.	10	95 04 80	2	24 00 00	3	23 07 80	5	47 97 00			90 00		90 00		
Bulacan.	3	32 03 68					2	32 00 00	1	03 68	90 00				
Cagayan.	5	166 78 58			1	16 00 00	3	26 78 58	1	124 00 00	640 00	600 00	1,240 00		30 81 64
Capiz.	1	16 00 00	1	16 00 00											
Cebu.	2	14 04 00							2	14 04 00	92 76	278 24	271 00		
Ilocos Sur.	3	11 51 84			2	70 00 00	2	9 20 00	1	2 31 84	25 00	26 00	51 00		
Isabela.	2	9 00 00													
Mindoro.	3	332 00 00							3	332 00 00	846 00	2,538 00	3,384 00		
Moro.	11	789 82 99			1	413 00 00	9	360 82 99	1	16 00 00	50 00	150 00	200 00		
Negros Occidental.	5	144 05 76			5		3	112 05 76	2	32 00 00	640 00		640 00		
Negros Oriental.	1	64 00 00					1	64 00 00							
Nueva Ecija.	85	989 07 50	7	55 86 00	11	108 66 30	48	600 95 20	19	223 60 00	1,497 36	2,926 27	4,423 63	2	31 99 97
Palawan.	4								4	1,023 00 00	2,797 50	7,432 50	10,230 00		
Pampanga.	2	32 00 00	1	16 00 00			1	16 00 00							
Pangasinan.	24	369 22 16	8	134 00 00	6	75 22 16	10	160 00 00							
Rizal.	8	126 85 06	1	22 00	1	2 00 00	3	97 22 00	3	27 41 06	274 00	706 58	980 58		
Samar.	2	30 00 00			1	14 00 00			1	16 00 00	201 50		201 50		
Sorsogon.	2	15 90 00													
Tarlac.	25	1,290 06 60	1	2 00 00	7	95 60 00	12	141 27 20	5	1,051 19 40	3,545 77	10,486 50	14,032 37		
Tayabas.	74	716 18 24	10	105 53 54	11	209 38 38	51	381 62 00	2	19 64 32	123 76	371 26	495 02	1	13 64 12
Union.	2	4 80 00	1	3 80 00			1	1 00 00							
Zambales.	6	56 05 00	1	6 00 00			5	50 05 00							
Total.	289	6,403 37 01	33	363 41 54	47	986 59 64	169	2,144 67 78	49	2,908 08 05	11,058 69	26,127 07	37,185 76	5	76 45 73

Detailed statement covering sales applications received under the provisions of Chapter II of the public land act (No. 926) during the period from July 26, 1904, the date of taking effect of the public land act, to and including June 30, 1913.

Province.	Applications received.		Rejected, canceled, withdrawn.		Pending action.		Pending report from forestry bureau.		Sales accomplished.				Patents issued.		
	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Value.	Amount received.		Num-ber.	Area.
												Principal.	Interest.		
Agusan.	3	Ha. a. c. 38 71 00		Ha. a. c. 12 96 00	1	12 96 00		Ha. a. c. 25 75 00		Ha. a. c.					Ha. a. c.
Albay.	1	15 97 05			2			15 97 05							
Amboi Camarines.	6	75 67 33	1	16 00 00	1	16 00 00	2	36 86 79		6 77 54	111 60	75 00			
Antique.	17	70 61 24	4	4 43 63	1	4 80 00	2	7 18 00		54 49 61	2 176.93	633.91	P22.16		
Bataan.	34	390 57 67	11	120 55 00	4	39 07 80	6	50 97 00		179 97 87	1 880.04	1 793.64	131.45	4	58 11 97
Bohol.	1	10 00 00													
Bulacan.	11	110 90 60	8	78 86 92			2	32 00 00		93 68	90.00				
Cagayan.	36	2 248 99 48	7	744 20 90	17	335 00 00	7	90 78 58		1 079 00 00	12 844.00	3 890.00	36.53		
Capiz.	6	58 21 46	6	58 21 46											
Cebu.	16	66 33 44	14	52 29 44						14 04 00	371.00	281.00	3.26		
Ilocos Norte.	53	620 57 81	37	426 68 80						2 754 03 01	2 754.03	1 401.09	112.57		
Ilocos Sur.	58	594 58 85	35	361 24 48	5	50 50 72	3	24 55 96		158 27 69	2 397.43	84.70			
Iloilo.	5	77 51 88	5	77 51 88											
Isabela.	12	270 72 62	6	61 76 82	1	15 95 80	2	10 00 00		183 00 00	1 990.00	1 945.00	432.00		
Laguna.	2	31 31 24								31 31 24	471.24	471.24	8.76		
Letra.	10	100 20 00	7	82 70 00	2	7 50 00	1	10 00 00							
Manila.	1	100 04 06													
Mindoro.	16	3 655 43 19	9	320 00 00						3 335 43 19	33 581.53	8 395.39			
Misamis.	1	7 947 85 91	25	4 594 89 82	5	869 00 00	17	547 62 29							
Moro.	52	7 947 85 91	25	4 594 89 82						1 936 33 80	19 237.38	7 698.04	5.99		
Mountain.	12	85 46 33	7	38 08 35						33 60 00	332.36	392.36			
Negros Occidental.	17	368 67 98	6	132 29 76			2	197 76 00		38 61 62	805.40	805.40			
Negros Oriental.	12	66 00 20					1	64 00 00		2 00 20	20.52				
Nueva Ecija.	142	1 849 12 36	42	322 49 36	14	181 49 36	55	931 81 20	31	413 65 50	8 321.63	3 968.34	305.83	2	31 99 97
Palawan.	2	1 229 83 22	2	32 00 00	1	2 18 40	1	1 024 00 00	8	1 071 64 82	10 761.86	3 269.36			
Pampanga.	4	32 40 90	2	16 12 50	1	28 40	1	16 00 00		22 25 00	451.25	174.20	9.52		
Pangasinan.	72	808 53 51	48	532 64 35	11	82 50 16	4	103 22 00	11	144 01 80	2 511.01	1 391.54	136.91		
Rizal.	50	505 41 29	34	256 17 49	1	2 00 00	1	103 22 00	2	29 11 67	619.08				
Samar.	3	46 00 00	1	16 00 00											
Sorsogon.	25	164 73 44	20	103 60 78	1	14 00 99	2	32 00 00							
Surigao.	3	19 59 49	3	19 59 49											
Tarlac.	41	1 639 87 75	7	218 96 95	12	146 60 80	16	207 10 60	6	1 067 19 40	14 672.27	4 065.77	43.93		
Tayabas.	149	2 710 74 18	38	606 74 95	31	207 76 43	60	497 26 48	20	1 398 96 32	10 734.44	7 998.67	510.59	1	13 64 12
Union.	5	34 80 00	4	33 80 00											
Zambales.	14	125 62 40	5	51 93 50	3	20 31 90	5	50 05 00	1	3 32 00	49.80	12.47			
Total.	892	26 971 08 15	397	9 390 93 96	113	2 007 33 70	212	4 159 84 53	170	11 412 95 96	127 446.30	50 848.15	1 844.20	7	103 76 06

Detailed statement covering lease applications received under the provisions of Chapter III of the public land act (No. 926) during the period from July 1, 1912, to and including June 30, 1913, showing the status of same June 30, 1913.

Province.	Applications received.		Pending action.		Rejected, canceled, or withdrawn.		Pending report from forestry bureau.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>
Bataan.....	1	160 00 00	.....	.....	.....	.....	1	160 00 00
Batanes.....	1	13 28 40	.....	.....	.....	.....	1	13 28 40
Bulacan.....	1	232 16 74	.....	.....	.....	.....	1	232 16 74
Isabela.....	1	25 00 00	.....	.....	.....	.....	1	25 00 00
Mindoro.....	3	2,997 00 00	.....	.....	1	1,000 00 00	2	1,997 00 00
Misamis.....	1	78 34 80	.....	.....	.....	.....	1	78 34 80
Moro.....	11	2,850 95 52	3	420 28 93	.....	.....	8	2,430 66 59
Nueva Ecija.....	40	9,963 00 00	11	4,696 00 00	2	240 00 00	27	5,027 00 00
Negros Oriental.....	1	4 96 50	.....	.....	.....	.....	1	4 96 50
Palawan.....	1	1,024 00 00	.....	.....	1	1,024 00 00	.....	.....
Pampanga.....	1	56 00 00	.....	.....	.....	.....	1	56 00 00
Pangasinan.....	1	112 00 00	.....	.....	.....	.....	1	112 00 00
Rizal.....	5	82 00 00	.....	.....	3	60 00 00	2	22 00 00
Sorsogon.....	1	318 80 00	.....	.....	.....	.....	1	318 80 00
Tarlac.....	47	3,147 09 26	29	2,098 66 10	5	136 00 00	13	912 43 16
Tayabas.....	1	1,024 00 00	1	1,024 00 00	.....	.....	.....	.....
Union.....	2	31 95 00	2	31 95 00	.....	.....	.....	.....
Total.....	119	22,160 56 22	46	8,270 90 03	12	2,460 00 00	52	11,389 66 19

Detailed statement covering lease applications received under the provisions of Chapter III of the public land act (No. 926) during the period from July 26, 1904, the date of taking effect of the public land act, to and including June 30, 1913.

Province.	Applications received.		Pending action.		Rejected, canceled, or withdrawn.		Pending report from forestry bureau.		Surveyed.		Leases executed.		Annual rental.
	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	Num-ber.	Area.	
		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>	
Aguasan.....	6	6,144 00 00			6	6,144 00 00							
Ambos Camarines.....	4	3,000 10 00	2	2,000 00 00	2	1,000 10 00							
Bataan.....	12	2,405 83 68	2	191 00 00	5	725 99 62	1	13 28 40	1	584 12 31	3	524 86 92	P266.16
Batanes.....	1	13 28 40					1	13 28 40					
Bulacan.....	1	232 16 74					1	232 16 74					
Cebu.....	4	23 19 25	1	5 20 05	3	17 99 20							
Ilocos Norte.....	1	16 00 00			1	16 00 00							
Isabela.....	2	1,049 00 00	1	1,024 00 00			1	25 00 00					
Laguna.....	1	30 00 00			1	30 00 00							
Leyte.....	1	20 53	1	20 53									
Mindoro.....	11	6,861 66 92	2	908 00 00	3	1,181 00 00	5	4,445 00 00	1	327 66 92			
Misamis.....	4	1,134 34 80	2	1,102 34 80	2	32 00 00							
Moro.....	173	44,716 00 73	41	11,471 56 35	93	16,037 15 26	14	3,075 51 59	15	9,187 14 72	10	4,944 62 81	2,452.32
Mountain.....	2	40 00 00			2	40 00 00							
Negros Occidental.....	3	920 00 00			3	920 00 00							
Negros Oriental.....	2	11 05 19	1	6 08 69			1	4 96 50					
Nueva Ecija.....	100	31,662 05 89	41	14,059 33 01	26	10,601 75 00	28	5,118 00 00			5	1,882 97 88	956.87
Palawan.....	19	9,118 84 00			13	5,747 00 00	2	1,120 00 00	3	770 30 33	1	83 84 00	41.92
Pampanga.....	5	3,128 00 00			4	3,072 00 00	1	56 00 00					
Pangasinan.....	4	216 44 46	1	7 46 00	7	96 98 46	1	112 00 00					
Rizal.....	12	451 82 79	2	100 00 00	2	324 31 17	2	22 00 00			1	5 51 62	8.27
Sorsogon.....	3	323 14 64			1	87 00 00	1	318 80 00			1	3 47 64	6.95
Surigao.....	1	02 42											
Tarlac.....	79	6,937 02 91	46	4,681 91 20	19	1,142 68 55	14	1,112 43 16					
Tayabas.....	4	2,450 00 00	1	1,024 00 00	2	1,364 00 00							
Union.....	3	61 95 00	3	61 95 00									
Zambales.....	1	500 00 00			1	500 00 00							
Total.....	459	21,446 18 35	148	36,643 08 05	196	48,993 84 26	74	15,730 44 79	20	10,869 24 28	21	7,445 30 87	3,732.49

FREE PATENTS.

Substantial progress has been made in the investigation of free-patent applications and all of those covering lands in the provinces of Batanes, Nueva Vizcaya, and Leyte have been examined. Quite a large group of investigations have been made in the Provinces of Isabela, Nueva Vizcaya, Negros Occidental, Palawan, and Tayabas. Surveys have been completed in the former group of provinces and are in progress in the latter. It has been found necessary to reject about 11 per cent of the applications in Nueva Vizcaya because the applicants have not occupied and cultivated the land for the period required by law. For the same reason 3 per cent were rejected in Batanes, 65 per cent in Ambos Camarines, 55 per cent in Nueva Ecija, 50 per cent in Leyte, and 35 per cent in Isabela. In many instances it was found that the applicants had sold their lands since filing their applications. In several instances applicants withdrew their applications because they preferred to attempt to secure titles through the land court, as the free-patent chapter prohibited the sale of the land for seven years after the patents were issued. For a similar reason some other applicants have refused to have their lands surveyed.

Three hundred and forty-one free patents were issued during the year. The investigation and survey of such patents will continue as fast as the funds and employees at the disposal of the bureau will permit, and it is believed that a large number of patents will be issued during the coming year.

NEW LEGISLATION.

At the last session of the Legislature there was passed an amendment to the public-land act renewing the opportunity to file free patents and extending this opportunity to the year 1923. As this act must go to the President and to Congress, its provisions can hardly become operative before the calendar year 1914. It is most important that it should meet with approval. A very large number of persons entitled to free patents remained ignorant of their privileges throughout the entire period during which they might have claimed them, in spite of every effort on the part of the bureau of lands to acquaint them with their rights, and were the opportunity to obtain free patents again extended, a very large number of such individuals would undoubtedly avail themselves of it. The arguments which held good for the granting of the privilege in the first instance still hold good.

IMPORTANT COURT DECISION.

During the year two applicants for free patents were enjoined by the court of first instance from entering upon a tract of land claimed by another individual who possessed no title. Upon investigation by the bureau of lands it was found that the free-patent applicants had cultivated the land and had claimed it in their own right for many years. The tracts which they desired were accordingly surveyed and patents issued. Upon presentation of their certificates of title they immediately entered upon the land. They were arrested and cited to appear before the court for contempt, but at the hearing of the contempt proceedings they presented their certificates of title and were immediately discharged, the court holding that they had a right to enter upon the land to which they had a Torrens Title.

The following table shows the status of all free-patent applications at the close of the year:

TOWN SITES.

No new town-site reservations were made during the year. The Zamboanga town site has been withdrawn by resolution of the Philippine Commission for the reason that the land within it was fully covered by the cadastral proceedings under the provisions of Act 2075.

The total value of all lots sold during the year in the Baguio town site is ₱5,991.37.

The following table shows the town sites under the public land act and their respective areas so far as they have been determined by the bureau of lands:

Name of town site.	Total area.	Name of town site.	Total area.
	<i>Sq. meters.</i>		<i>Sq. meters.</i>
Baguio.....	55,949,800	Jolo.....	779,726
Bontoc.....	3,766,487	Libungan.....	370,601
Bosoboso.....	379,992	Malaybalay.....	5,760,000
Butuan.....	493,158	Mailag.....	5,760,000
Cabcaben.....	1,615,378	Malabang.....	1,550,703
Cervantes.....	3,439,244	Olongapo.....	3,002,635
Cotabato.....	408,740	Parang.....	648,337
Dansalan.....	645,903	Pinamalayan.....	462,800
Dapitan.....	2,149,132	Sibul Springs.....	250,000
Davao.....	2,432,815	Sumilao.....	4,150,000
Dipulog.....	2,861,363	Tangculan.....	5,760,000
Impasugong.....	5,760,000	Tarlac.....	573,694

UNPERFECTED TITLES.

There have been 496 notices received from the court of land registration of cases in which the applicant requested the benefits of Chapter VI of the public land act, an increase of 40 over the previous year, while the increase in area of land covered has been 16,711 hectares.

The following table shows the action taken by the director of lands and the reasons therefor, also the division of the applications between private persons, municipalities, and provinces:

No opposition.....	320	
No action.....	3	
Opposition.....	173	
	<hr/>	496
Reasons for opposition:		
Land included in civil reservation.....	23	
Difference in area between title presented and survey.....	20	
Government property.....	9	
No titles presented with cases.....	93	
Land appeared to be public land.....	16	
Land appeared to be plazas.....	12	
	<hr/>	173
Titles applied for by:		
Private parties.....	413	
Municipalities.....	77	
Provinces.....	6	
	<hr/>	496

COMPULSORY REGISTRATION.

Six additional cases were filed in the court of land registration covering lands in the municipality of Asingan, Province of Pangasinan. These cases included all the balance of the lands in that municipi-

pality not already covered by the two cases previously reported, and aggregated 5,704 hectares divided into 5,562 parcels. Because of the lack of judges in the court of land registration no hearing has been had on any of them, but hearings have been had in the following cases:

Binalonan, Pangasinan: One case; 1,151 hectares; 1,278 parcels; case heard; no decision rendered.

Municipality of Cavite, Cavite: 21 hectares; 274 parcels; hearing held July 2.

Pilar, Bataan: 212 hectares; 175 parcels; parcels adjudicated to private owners.

There were filed three additional cases covering small areas the titles to which were in doubt; two have been decided in favor of the occupants but no decision has been reached in the third.

RESERVATIONS OTHER THAN TOWN SITES.

The following table shows the number and purpose for which reservations other than town sites have been made during the year. It is followed by a table showing all reservations of every kind which have been made since the public-land act has been in effect.

Reservations other than town sites made under the provisions of the public-land laws during the fiscal year 1913.

Province and purpose.	Insular.		Municipal.	
	Num-ber.	Area.	Num-ber.	Area.
		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>
Cagayan, Constabulary.....	1	1 02 03		
Ambos Camarines, non-Christian settlement.....	1	1,553 10 50		
Cebu, agricultural experiment station.....	1	6 36 02		
Ilocos Norte, school.....			1	64 81
Isabela, Constabulary.....	1	10 00		
Laguna, watershed.....	1	239 39 27		
Mountain, school.....			1	26 08
Palawan:				
Leper colony (14 islands).....	1			
Penal colony.....	1	41,005 99 53		
Pampanga, civil public.....			1	119 21 00
Total.....	8	43,350 95 00	3	120 11 89

Reservations other than town sites made under the provisions of the public-land laws during the year ended June 30, 1913.

Province and purpose.	Insular.		Municipal.	
	Num-ber.	Area.	Num-ber.	Area.
		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>
Agricultural experimental station.....	1	6 36 02		
Civil public.....			1	119 21 00
Constabulary.....	2	11 02 03		
Forest.....	1	535 07 65		
Leper colony (14 islands).....	1			
Non-Christian settlement.....	1	1,553 10 50		
Penal colony.....	1	41,005 99 53		
School.....			2	90 89
Watershed.....	1	239 39 27		
Total.....	8	43,350 95 00	3	120 11 89

Reservations other than town sites made under the provisions of the public-land act to and including June 30, 1913.

Purpose.	United States Government.		Insular.		Provincial.		Municipal.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
Agricultural experimental station.....		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>		<i>Ha. a. c.</i>
Do.....			7	2,210 00 02				
Cemetery.....			1	(¹)				
Civil public.....			1	27 83 25	11	309 93 33	11	111 53 72
Do.....					1	(¹)		127 68 18
Coal.....	2	6,479 00 00						
Constabulary.....			14	58 82 91				
Customs.....			2	10 13 28				
Forest.....			2	1,015 07 65				
Highway.....			1	28 00 00	2	2 98 10		
Do.....			1	(¹)				
Leper colony.....			1	39,672 00 00				
Do.....			1	(¹)				
Lighthouse.....	3	10 00 00	38	237 75 05				
Do.....			28	(¹)				
Market.....							1	20 00
Military.....	30	28,611 35 41						
Do.....	7	(¹)						
Mineral springs.....			2	4 38 91				
Monument.....			2	1 09 00				
Naval.....	2	1,681 00 00						
Do.....	4	(¹)						
Non-Christian settlement.....			3	32,873 74 83				
Parks.....			2	1 98 80				
Penal colony.....			2	49,811 99 53				
Quarantine and Marine Hospital Corps.....			1	10 00 00				
Quarry.....			1	37 00 00				
School.....					32	781 66 50	26	29 34 71
Water power.....			1	5,900 00 00				
Do.....			1	(¹)				
Wireless telegraph.....	4	3,805 00 00						
Water supply.....	1	239 39 27					4	27,131 43 02
Total.....	41	36,882 00 00	81	132,122 18 00	46	1,204 79 34	48	27,401 68 19
	11	(¹)	32	(¹)	1	(¹)		

¹ Not given.

FORESHORE AND LANDS UNDER WATER.

There have been 8 applications to lease foreshore lands or lands under water, of which 2 have been rejected on recommendation of the secretary of commerce and police, 2 are pending advertisement, 3 are pending with the secretary of commerce and police in accordance with the provisions of section 5, and the lease has been executed for 1 at an annual rental of ₱400. A temporary lease has also been executed for a small wharf on the Pasig River at an annual rental of ₱96. Nine foreshore leases have been executed since the provisions of Act 1654 became effective at a total annual rental of ₱1,683.50.

MANILA RECLAMATION AREA NO. 1.

Details of the leases executed on this area will be found in the report of the director of lands and need not be given here.

LANDS FORFEITED TO THE GOVERNMENT FOR NONPAYMENT OF TAXES.

The number of certificates of forfeiture of land for nonpayment of taxes covered only about half as many parcels as during the previous year, showing that a larger percentage of landholders are paying

their taxes. Three thousand two hundred and ninety-four parcels of such land were repurchased by the original owners, as against 1,869 for the previous year. The Province of Samar still leads the delinquent-taxlist; Leyte, Sorsogon, and Surigao are bad. There have been no forfeitures in Batangas, Camarines, and Nueva Ecija, and investigation has shown that the reason so far as concerns Nueva Ecija is that each municipality brings suit under the provisions of section 83 of the municipal code against tax delinquents. Upon the rendering of judgment, execution issues, and the land is sold and the proceeds are applied to the payment of the taxes and penalties. This section of the code was not expressly repealed by act 1791, and the question as to whether it was repealed by indirection remains to be determined. As a rule, the land thus forfeited to the government is public domain which has been occupied by private individuals who claim private ownership, declare the same for taxes, and fail to pay them. They would have little prospect of obtaining title and hence, if provinces and municipalities dispose of such lands through a tax sale, they are in reality selling public lands contrary to the provisions of the public-land act. This clouds the title to much land which should be taken up by homestead, purchase, or lease, as an application for the registration of title to it would necessarily be contested by the government, and the cost of the litigation would probably exceed the value of the land if taken up under the provisions of the public-land act, so that the whole condition is unfortunate.

The following tables show the facts as to the registration of mining claims:

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SURVEYING AND DRAFTING.

All vacant places in the surveying and drafting division have been filled. The work accomplished is greatly in excess of that during any previous year, but the demand has been so great that it is nevertheless about three months in arrears.

It was hoped that the application of the cadastral act would somewhat relieve the pressure for individual surveys, but lack of funds prevented rapid progress on cadastral survey work.

There were 3,810 surveys made, covering 8,924 parcels of land with a total of 203,907 hectares, at a cost of ₱367,840.27. There are also a large number of incomplete surveys upon which more or less work has been done.

THE CADASTRAL ACT.

The cadastral act (No. 2259), authorizing the surveying of all lands within a given district at one time, bringing the adjudication of the titles to the land surveyed before the land court, and extending over a period of five years the payments of cost by the landowners, was passed by the Philippine Legislature on February 11, 1913, after three years of determined effort to secure its passage, which means much to the small landowners of the islands, as it enables them cheaply to secure title to their land. It is anticipated that before the close of the next fiscal year approximately 100,000 parcels will have been surveyed under the provisions of this act and will be ready for the court of land registration, but the number of judges available to hear them is so small that it will be two or three years before the court can even dispose of the cases already under way.

It is believed that the cadastral act will reduce the cost of registration of title by at least one-half; will segregate private property from the public domain; will give insular, provincial, and municipal officials plans of municipalities, barrios, and sitios, including the boundaries thereof, roads, streams, etc., and the actual boundary of each private land holding, with its area. Such data will greatly facilitate the collection of taxes. This work will therefore be very valuable for provinces and municipalities. The director of lands recommends that they be granted the same time for the payment of their portion of the cost of cadastral surveys as is granted to individuals. I concur in this recommendation.

PROVINCIAL ROAD SURVEYS.

There were surveyed 3,057 kilometers of road at a cost of ₱32,802.61.

The following table shows all provincial road surveys which have been completed up to date:

	Cost.	Stations.	Kilometers.
1909.....	₱59,367.35	30,013	3,285
1910.....	64,917.68	25,927	4,610
1911.....	17,833.29	6,489	7,998
1912.....	28,566.46	2,771	531
1913.....	32,802.61	18,129	3,057
Total.....	203,487.39	83,329	19,481

MUNICIPAL STREET SURVEYS.

One hundred and forty barrio and municipal street surveys were executed at a cost of ₱3,959.56. The bureau of lands now has on hand street surveys for most of the municipalities in the islands and for a large number of the more important barrios and outlying villages as well. In all of these reference monuments for future surveys have been established.

INADEQUACY OF BUREAU OF LANDS QUARTERS.

The quarters of the bureau of lands are very seriously overcrowded. Forty per cent more space is needed, not only to secure reasonable efficiency from the working force, but to conserve health. The vault space has become so congested that a fire would cause very serious losses.

It is understood that the court of land registration is also hampered for room.

In my opinion it would be to the interest of the government to have both the court of land registration and the bureau of lands in one building. If, as seems to be the case, such an arrangement is impracticable with the limited space afforded by the buildings now at the disposal of the government, a new structure should be erected.

A very full and detailed account of the operations of the bureau of lands will be found in the annual report of its director.

Respectfully submitted.

DEAN C. WORCESTER.
Secretary of the Interior.

To the PHILIPPINE COMMISSION,
Manila, P. I.

REPORT OF THE SECRETARY OF COMMERCE AND POLICE.

DEPARTMENT OF COMMERCE AND POLICE,
Manila, September 26, 1913.

GENTLEMEN: I have the honor to submit the following as the report of the work of the department of commerce and police for the fiscal year ended June 30, 1913, unless otherwise stated:

It has been made briefer than some of the previous reports of this department, as it was not considered necessary or advisable to duplicate the details of the activities of the several bureaus in the department, all of which have issued separate and complete annual reports in printed form for the fiscal year 1913.

The bureaus and offices in the department of commerce and police are: Bureau of constabulary, public works, navigation, posts, coast and geodetic survey, and labor; and the offices of the supervising railway expert and consulting architect. In addition, the general supervision of all corporations other than building and loan associations, banks, and trust companies, is vested in the secretary of commerce and police.

BUREAU OF CONSTABULARY.

PERSONNEL.

Col. James G. Harbord, United States Army, assistant director, was in charge of the bureau as acting director from July 1, 1912, to October 3, 1912. On the latter date Brig. Gen. H. H. Bandholtz, United States Army, having returned from the United States, assumed control of the organization and remained in control until the end of the fiscal year.

Capt. John W. Craig, United States Army, inspector, was relieved from duty on January 12, 1913, under the provisions of act of Congress of August 24, 1912.

Lieut. Cols. John R. White and George D. Long, assistant directors, are on duty in the United States, Lieut. Col. White being assigned to such duty July 12, 1912.

Col. John B. Bennett was relieved from command of a district in December and assigned in charge of inspections at constabulary headquarters.

STRENGTH.

On June 30, 1913, the constabulary force consisted of 318 officers and 4,480 enlisted men, a decrease of 5 officers and an increase of 323 enlisted men as compared with the same date of the previous year.

MEDICAL DIVISION.

The medical division consists of 14 officers and 106 men distributed throughout the archipelago. During the year the division treated 1,038 cases in hospitals, 2,670 cases in quarters, and also treated 2,256 cases other than constabulary.

PEACE AND ORDER.

(a) *District of northern Luzon.*—There have been no organized bands of ladrones or desperadoes in this district during the past year. Petty crimes have occurred at places, due to personal differences. Much progress has been made in the extension of trails through this district, which contributed a great deal to the curtailment of crime.

(b) *District of central Luzon.*—There are still two or three notorious outlaws at large in this district. They are, however, in hiding and remain inactive through fear of capture. The most important of these outlaws are Caesario Paraless, of Cavite and Batangas, and Esteban Deseo, of Tayabas Province. There are no organized bands of outlaws in the district.

(c) *District of southern Luzon.*—There are no organized bands of outlaws in this district. A seditious organization of about 400, of Gandara, Oquendo section of Samar, was discovered a few months ago. An uprising was contemplated, but the leaders of the band were arrested some days before the date set for the uprising, brought to trial, and convicted.

(d) *District of the Visayas.*—Only one ladrone chief is still at large in this district. His following is small and unimportant and in possession of very few arms. The stealing of animals constitutes about the only peace disturbance in this district. The wild people in the mountains on the island of Negros have committed no depredations. They are grouped in small towns by themselves, which are difficult of approach, and they maintain very little intercourse with the other inhabitants of the island.

(e) *District of Mindanao.*—The constabulary has the entire responsibility for the maintenance of order in the Agusan Valley region. There have been several important captures of malcontents who were inclined to raise disturbances, the principal one being Taoidi and his relatives. In 1908 this chief caused the murder of Mr. Ickis, of the bureau of science, and has been at large ever since.

(f) *District of Lanao.*—In this district nearly all of the bad men have been captured or killed, and conditions are much better now than they have ever been at any previous time.

(g) *District of Zamboanga.*—Most of the outlaw bands in this district were captured or practically destroyed during the year.

(h) *District of Davao.*—There are still some small bands of outlaws in different parts of this district, the principal ones operating on the borders of Lanao, Cotabato, and Sarangani Bay.

(i) *District of Jolo.*—The disarmament of the Moros in this district is progressing and there are very few arms remaining in their hands. A greater part of the activities in this district has been made the subject of special reports.

POLITICAL CONDITIONS.

Opinions have been expressed in different quarters that failure of the Congress of the United States to pass the Jones bill or a similar one of like import at an early date would cause disquietude and lead to serious disturbances of the peace. I am of the opinion, however, that wiser counsel would prevail and that there need be no fear of any unusual outbreak against existing conditions of government.

BARRACKS AND QUARTERS.

There have been some additional cottages constructed at Baguio, Mountain Province, as the quarters there were entirely inadequate for the housing of the officers and students.

MUNICIPAL POLICE.

Act No. 2169, passed by the Legislature on February 6, 1912, provided for the reorganization, government, and inspection of the municipal police of the municipalities, provinces, and subprovinces, and placed the onus upon the constabulary. The improvement in municipal police has been steady and great. A uniform has been provided for the police in all the provinces. Organization has been effected and defects have been gradually corrected, and on the whole the progress has been most satisfactory. It is regrettable, however, that the number of constabulary officers is too few to permit of wider supervision. The intelligence of the men now appointed as municipal police is much higher than it has been in the past, which tends to efficiency, but the scarcity of municipal funds prevents sufficient compensation for the duties performed.

PENSION AND RETIREMENT.

It is again earnestly recommended that a pension and retirement fund be created by the Legislature. A pension bill was introduced in the last Legislature, but failed of passage. This bill was carefully prepared and given a great amount of study by persons versed on the subject of pensions. The small fund now existing as a pension and retirement fund is entirely inadequate for the purpose. There has been collected from officers and enlisted men and other sources between January 1, 1910, and June 30, 1913, the sum of ₱251,875, and pensions paid during the same period amounted to ₱20,717, leaving a balance on June 30, 1913, of ₱231,158. There are now on the pension rolls 62 persons who receive monthly ₱470. Of these 62 pensioners, 27 belong to those killed or wounded in action, 7 pulmonary tuberculosis, and 6 drowning. In order to make the constabulary reach the highest point of perfection, men must be induced to enter it and accept it as a career. This they have hesitancy in doing because of the lack of provisions for retirement when they reach the age limit.

FIREARMS.

There has been a net increase of firearms licenses issued by the director of constabulary during the past year of 387. The greatest increase is in that of shotguns, the increase being 376.

COST.

The total cost of the constabulary for the fiscal year 1913 was ₱3,307,081.16, as against ₱3,188,709.25 for the previous year.

BUREAU OF PUBLIC WORKS.

PERSONNEL.

Director Warwick Greene was in control during the entire year. On June 30, 1913, there were employed 145 engineers, as against 164 on June 30, 1912. Of these, 127 were Americans and 18 Filipinos, as against 141 and 13, respectively at the close of the preceding year. The average annual salary of all engineers was ₱4,192, a slight increase over the average salary during the year 1912.

The total number of employees of the bureau on June 30, 1913, was 1,417, of whom 1,007 were Filipinos and 410 Americans, an increase of 6 per cent of the total in Filipino employees during the year. The bureau has endeavored continually to develop a large Filipino engineering personnel, but the progress has been slow because the number of Filipino graduate engineers is small and they lack practical experience. Filipino engineers, however, are used to the utmost, four being now in charge of districts. The average length of service of the engineers now employed increased from two years and nine months in 1912 to three years two months and eleven days in 1913.

SCOPE OF WORK.

The bureau constructs and maintains public works in the Christian provinces with the exception of those in charge of the bureau of navigation, such as port works and lighthouses. Some of these projects are the building of buildings, roads and bridges, the building or supervision of building of irrigation systems, the drilling of artesian wells or construction of other water-supply systems, river control, sewerage systems, and power plants. In addition to the foregoing the bureau maintains and operates all government automobile lines, including those of Benguet and Panay, and is charged with the enforcement of the automobile law and with the determination of water rights, subject to the approval of the irrigation council.

ROADS.

Construction.—During the year 257.6 kilometers of first-class roadway were constructed at an average cost of ₱9,000 per kilometer, exclusive of structures, making a total of 2,097 kilometers of first-class roads in the islands (not including Manila, the Moro Province, or the special government provinces, except Benguet), of which 1,608 have been constructed during the last six years. During the year ₱2,290,000 were spent in construction.

Maintenance.—The caminero system of maintenance, which has been in operation for six years, has been found to be most satisfactory and the least costly. Maintenance of roads begins the day the road is completed, and each section is under careful and continuous inspection and repair. During the year ₱1,580,000 were spent in the maintenance of existing roads. With the increased traffic which improved roads invite, and the importation of heavy trucks and automobiles, the amount required for maintenance has greatly increased.

The subject of road construction and maintenance is being given continued careful engineering study by the bureau. Experiments

with oiled roads and bituminous-bound roads have proved most satisfactory, and in many cases most economical in maintenance. The construction of bituminous, concrete-block, and vitrified-brick roads is to be experimented with in the near future.

BRIDGES.

There were completed during the year 508 permanent bridges and culverts, with a total span length of 2,642 meters—150 more in number and almost 1,000 meters in span in excess of that constructed during the preceding year. All the bridges constructed except 11 were of reenforced concrete. In addition to the permanent structures, there have been constructed a number of collapsible or floatable deck bridges crossing streams which are fordable during the dry season, and where fording is impracticable or dangerous during the rainy season. After several years of experiment and development they have been perfected until they are quite satisfactory. Two of the most important permanent bridges under construction at the present time are the Laoag River bridge in Ilocos Norte and the Loay bridge in Bohol. The former consists of 7 steel trussed spans, each 48.77 meters long, and will cost completed ₱240,000. The Loay bridge is of the horizontal swing type, with a clear opening 21.41 meters in width. This bridge will cost ₱80,000 completed. The total amount expended during the year for bridges and culverts was ₱1,500,000.

WATER-SUPPLY SYSTEMS.

During the year 92 successful artesian wells were drilled by deep well rigs, and 54 successful wells by jet boring rigs. The failures were 14 of the first-named class and 1 of the second, a total of 15 as against 22 failures during the preceding year. Experience obtained in past years has made the operators of well outfits more proficient in the selection of favorable localities. There were operated during the year 25 deep well steam rigs, and the total amount expended in well drilling was ₱420,841. Quite a number of small water systems other than wells driven were completed during the year.

Osmena waterworks.—On October 15 and 16 a severe typhoon swept over the island of Cebu, which caused serious damage to the waterworks, both dam and pipe line, of the city of Cebu. For 10 years prior to this typhoon the heaviest rainfall had been 6 inches in 24 hours. During this typhoon 22 inches of rain fell in 6 hours. Notwithstanding this fact, the water was cut off only a short time and the system has been in continuous and successful operation since. The repairs and additional construction found necessary are now almost completed.

IRRIGATION.

San Miguel, Tarlac.—This system, which was recorded as partly destroyed in the last report, is almost completed. The system should have been completed on August 1, but because of lack of labor and other causes it will be finished in November. It will irrigate 10,000 acres of land at an average cost of ₱110 per acre.

Santa Barbara system.—Work will be begun on this system within a short time, and will require 2 years to complete, at a cost of ₱736,000

or an average of ₱74 per acre. The system is located on the island of Panay directly north of the city of Iloilo.

In view of the falling off in receipts for customs it is doubted if any other large irrigation project will be begun during the year. Should a bond issue be authorized by Congress, it is probable that irrigation will receive its proportion of the moneys realized therefrom.

CITY OF BAGUIO AND ROADS LEADING THERETO.

City of Baguio.—Many improvements have been made in the city during the past year. The telephone system has been extended. The improving of the sewer system resulted in less sickness during the year than heretofore. The cessation of the erection of Government cottages resulted in the hotels being taxed to their utmost. A number of private cottages have been erected with the prospect of many more being built during the present year.

Benguet road.—The cost of maintenance of the Benguet road was ₱179,276, or ₱75,000 less than the preceding year, although the traffic over the road has greatly increased. The reason for this reduction in the cost of maintenance is that there were no great slides of the mountains into the canyons as occurred in the year 1912. It will be necessary to maintain the road during the present and next year. The railroad will then be completed and the same necessity for the road will no longer exist.

Aringay-Naguilian road.—This road has been diverted and broadened from what was the trail until it is a fairly good road for wagons and automobiles during the dry season. It is now being widened and metaled by the province, with some assistance from the Insular Government, from the city limits of Baguio to the boundary line of La Union province. It closely follows the ridges and is, therefore, not subject to such great damage from floods during the rainy season as is the Benguet road which lies in the valley for a long distance.

AUTOMOBILE LINES.

Benguet line.—There were carried over this line during the year 22,390 passengers without a serious accident. This success is largely due to the block system recently established and the experienced drivers employed. There were transported from the lowlands to the mountains 7,000,000 kilos of freight and 700,000 kilos of express and baggage. The line was operated at a loss of ₱33,495, including all surcharges and duties, which in the case of this line are very large.

Panay automobile line.—This line was operated at a financial loss during the year. It has been determined to continue the line for six months longer because of the great assistance it is to the inhabitants in the section in the transportation of their products to the markets, and for the further reason that it promises in the near future to be self-supporting.

BUILDINGS.

The principal building constructed during the year by administration was University Hall, situated on Calle Padre Faura, Manila. It was built of reinforced concrete around a framework of structural steel, and was completed in 295 days at a cost of ₱251,794.

BUREAU OF NAVIGATION.

FRANK P. HELM, DIRECTOR.

PERSONNEL.

As noted in the last annual report of this department, the position of first assistant director of navigation became vacant on February 29, 1912. It remained vacant until March 1, 1913, when Mr. K. S. Heck, who has been in the division of port works of the bureau since November 1, 1905, and chief of the division since November 1, 1910, was appointed assistant director. In addition to the duties of assistant director of the bureau and superintendent of interisland transportation, he retains his former position of chief of the division of port works and lighthouse construction.

The position of marine superintendent, which had likewise been vacant since February 29, 1912, was on January 6, 1913, filled by the appointment of Mr. C. E. Morgan, who in addition to having direct charge of the division of navigation acts as instructor in navigation at the nautical school conducted by the bureau.

The total number of officers and employees in the service of the bureau was reduced 339 during the year, there being 1,110 employed on June 30, 1913. This number represents considerably less than half the force maintained by the bureau three years ago, the bureau having been required to operate on the same annual appropriation during the past three fiscal years with additional capital expenses forced upon it from time to time by legislation and otherwise.

Of the 1,110 officers and employees on the rolls on June 30, 1913, 110 were Americans, 959 Filipinos, 35 Chinese, and 6 of other nationalities.

NAVIGATION DIVISION.

(a) *Operation of fleet.*—The fleet maintained by the bureau was reduced from a total of 37 vessels on June 30, 1912, to 35 vessels on June 30, 1913, 2 launches having been condemned and dismantled. These vessels include 1 cableship, 14 cutters, 4 seagoing launches, 2 auxiliary ketches, 13 harbor and river launches, and a combination stern-wheel dredge and snag boat, having a total valuation of ₱2,134,-164.60. In addition, a number of small motor tenders are attached to the cutters and a steam tender is operated in connection with the cableship.

But 22 of the total of 35 vessels were in operation at the close of the fiscal year, being 6 less than at the same date in 1912. The vessels operated were 1 cableship, 6 cutters, 3 seagoing launches, 11 harbor and river launches, and a combination dredge and snag boat.

As has been the custom for a number of years, two cutters were loaned to and operated by and at the expense of the bureau of coast and geodetic survey. One cutter was chartered to and operated by the United States Army until January 18, 1913, when the charter was terminated and the vessel placed out of commission. One seagoing launch was chartered during the entire year to the bureau of constabulary.

Owing to the difficulty experienced by the bureau in carrying out all the work required of it within the funds provided by the Legislature, the cableship *Rizal* has been used for transporting commercial

cargo more than ever before, in order to secure as much revenue from her as possible. This resulted in one or two instances in her being on outside work when cables were out of order, and thereby caused some delay in the making of necessary repairs to restore the service. Much cable work was performed in repairing damages caused by severe typhoons in the Visayas during October and November, 1912, and on two occasions this class of work was handled for the military authorities. The *Rizal* made two trips to Saigon, Indo-China, and one to Rangoon, Burma, for cargoes of rice for Manila. One trip was made to Hongkong for docking and repairs, at the finish of which she proceeded direct to Haifong to secure a cargo of cement for Manila. Several cargoes of lumber were carried between interisland ports.

The necessity for keeping a larger number of cutters in commission for use in cases of emergency was made manifest at the time of the destructive typhoons which visited the Visayan Islands in October and November, 1912. All the boats available were pressed into service for the distribution of food and medical supplies and the moving of freight and passengers; but every cutter owned by the bureau could have been used to great advantage. Numbers of commercial vessels were lost and light stations damaged, and business suffered severely on account of the lack of transportation facilities.

Of the six cutters operated, two were assigned to duty as lighthouse tenders, but owing to the shortage of vessels and the necessary withdrawal of these two at times for other urgent service, lighthouse inspection and repair work suffered somewhat. The lighthouse tender *Mindoro* stranded on Animosa Reef on December 27, 1912, and was not floated until January 15, 1913, it appearing for a time that she would become a total loss. She arrived in Manila in tow of another cutter on January 19, 1913, and has been repaired at a cost of ₱18,000.

During the months of May and June, one to three cutters, a large scow, and at times the cableship *Rizal* were under charter to a Manila firm engaged in salving the Swedish steamer *Nippon*, which, while bound from Manila to Singapore, was caught in a severe typhoon during the first week in May and stranded on Scarborough Reef on May 8.

The gross cost of operation of the fleet was ₱919,717.67. Receipts from operation, including charters to other bureaus and to outside parties, and the transportation of passengers and freight, amounted to ₱379,720.38, which amount being credited to the cost of operation leaves a net charge against bureau funds of ₱539,997.29, a reduction of ₱76,897.36 as compared with the previous fiscal year.

(b) *Commissioned and enlisted force.*—Thirty-eight commissioned officers left the service during the year by resignation.

About 98 per cent of all the enlisted men whose terms of enlistment expired in the course of the year reenlisted. As there were but 30 per cent of reenlistments in the fiscal year 1912, the improvement in this respect is marked.

(c) *Medical service.*—One thousand eight hundred and thirty minor operations and dressings and 121 vaccinations were performed in the dispensary at bureau headquarters, Manila. Three hundred and ten examinations for enlistment were made, 153 cases were sent to the hospital for treatment, and 56 cases were treated in quarters. One officer met his death by drowning, and one enlisted man died

as a result of acute heart trouble following rheumatism. The health of the officers and men has been generally good, and there have been no cases of smallpox or beriberi.

The medical officer detailed to the bureau from the United States Army has made frequent inspections of contract and bureau vessels and has required that their sanitation be kept up to a high standard.

(d) *Offenses against the service.*—Two commissioned officers were discharged from the service for violation of regulations, one of whom was pardoned several months later and reinstated. One officer who had been dishonorably discharged during the fiscal year 1912 was reinstated and permitted to resign.

There were 75 trials by summary court, all but 6 of which resulted in convictions. Of the convictions, the penalty in 38 cases was the imposition of fines totaling ₱696.63, which was credited to the pension fund; in 7 cases reduction in grade; in 3 cases fines and reduction in grade; in 13 cases fines and imprisonment; and in 3 cases dishonorable discharge. In addition to the above, 8 enlisted men were discharged from the service by authority of the undersigned.

MARINE RAILWAY AND REPAIR SHOP.

As organized at present, the shops of the bureau consist of a main machine shop, woodworking department, sawmill, foundry, blacksmith shop, boiler-making department, coppersmithing shop, electrical and plating shop, and the docking department.

A 50-foot motor towboat for use at the penal colony on the island of Palawan was completed during the year and sailed under her own steam for Puerto Princesa on January 7, 1913. Two 30-foot cabin cruisers, equipped with 20-horse power engines, were constructed for the provinces of Mindoro and Nueva Vizcaya. Two 25-foot motor launches and one 20-foot cutter were built for the bureau of coast and geodetic survey, and much other boat building and repair work of lesser importance has been handled. Work has also been commenced on the construction of a 40-foot motor cruiser for the Manila Railroad Co. and a 22-foot motor whaleboat for the bureau of coast and geodetic survey.

Two steel dump scows were built for the division of port works, a dozen steel towers constructed for light stations, and one sixth-order flashing light fabricated in the lighthouse apparatus shop.

Propellers for cutters and launches, anchors for buoys, engine and dredge parts, and many minor pieces were cast in the foundry.

A considerable amount of outside work was performed for the United States Army and for private parties with the authority of the undersigned in each case.

The financial status of this division follows:

Credit balance June 30, 1912.....	₱27, 954. 86
Receipts from operation, fiscal year 1913.....	577, 680. 58
Total available for expenditure.....	605, 635. 44
Expended for new equipment and permanent shop improvements.....	₱10, 701. 92
For maintenance.....	12, 546. 04
For operation.....	501, 567. 43
Total expenditures.....	524, 815. 39
Unexpended balance, June 30, 1913.....	80, 820. 05

INTERISLAND TRANSPORTATION OFFICE.

The number of interisland steamships operating over specified routes under contracts with the government was reduced one during the year. There are now eight routes under contract, for seven of which annual subsidy payments of ₱103,544 are made. One route is contracted without subsidy. Several new steamers have been purchased by interisland steamship companies to replace vessels destroyed or worn out in the service, and the accommodations and service offered by water carriers in the islands are better than ever before.

Two secondary routes were continuously maintained by vessels of the bureau, and a few additional routes were temporarily established in the Visayas to serve the typhoon-stricken districts in the latter part of the calendar year 1912, and maintained only while their services were urgently necessary. The commercial steamer *Borongan* was chartered by the bureau and operated during a period of 60 days from October 25, 1912, in the district devastated by typhoons. A secondary bureau route with Cebu and Iloilo as the terminal ports was established on December 5, 1912, and discontinued March 23, 1913. On October 1, 1912, a secondary bureau route was established with headquarters at Calapan, Mindoro, to serve Batangas and Mindoro ports, taking the place of a commercial seagoing launch which was wrecked in September, 1912. This route was discontinued on December 6, 1912.

DIVISION OF PORT WORKS AND LIGHTHOUSE CONSTRUCTION.

Owing to shortage of funds, very little new construction was performed during the year, practically all of the energies of this division being confined to works of maintenance and repair.

The following allotments were made by the undersigned:

For the construction of riprap jetties at the mouth of the Vitas Estero, district of Tondo, city of Manila.....	₱20,000.00
For the construction of new steel hulls for dredges Nos. 3 and 7.....	90,000.00
For improving the walls of the Binondo Estero from the Pasig River to Calle San Fernando, and for placing concrete curbing along the Pasig River wall near Plaza Moraga, city of Manila.....	5,800.00
For repairing the damage caused the riprap wall and embankment at the west end of the concrete sea wall at Cebu.....	1,200.00
Total.....	117,000.00

In addition to the above allotments, the sum of ₱23,302.75 was transferred to the credit of the bureau of navigation by the Governor General, to be used for the completion of unfinished roadways, the construction of which had been previously authorized, in the port district, city of Manila, and a few projects were handled for provinces and municipalities to whom funds had been loaned by the Governor General.

(a) *Manila dredging*.—In the fiscal year 1912, as noted in our last annual report, 50 per cent more material was removed by dredging from the esteros in the city of Manila than during all the previous years of American occupation combined. That record was exceeded during the fiscal year 1913 by 100 per cent.

In the district of Tondo, where aside from the necessities of navigation, deep and clean esteros are essential to the health of thousands of people, the dredging of the Vitas Estero was completed, providing a channel navigable for launches and other vessels of 5-foot draft a distance of approximately 2 kilometers from the 6-foot contour in the bay. Four hundred meters of the Bancusay Estero from its confluence with the Vitas Estero, and an additional kilometer of the Canal de la Reina were dredged out. On June 30 there remained but 150 lineal meters of the Canal de la Reina to be dredged in order to complete a continuous navigable channel from the Pasig River to the bay at the mouth of the Vitas Estero, a total distance of more than $4\frac{1}{2}$ kilometers. This is probably the most important estero channel in the city, the amount of traffic therein being very large and increasing as the improvement goes forward. The maintenance of this channel will be relatively easy.

Two hundred and fifty-six thousand cubic meters of the material removed from Tondo Estero have been used for the filling of lowlands. Where a hydraulic dredge could be used, some of this material was given away gratis, some was sold, and some was exchanged for land required to widen esteros to a sufficient width to permit the dredge to be operated. Where small dredges were used, some of the material was deposited on the banks to be taken away by owners of adjacent property, and some loaded on scows and placed at convenient points for unloading by property owners desiring to use it. Thousands of square meters of low, unsanitary lands have thus been filled, resulting in improved sanitary conditions, and drainage facilities. An increase in the public revenues on account of higher valuations of filled areas for taxation will also result.

In addition to the extensive operations carried on in the district of Tondo, the dredging of the Paco Estero to complete the navigable channel from the Pasig River to the bridge on Calle Herran was finished, 16,309 cubic meters of material were removed from the San Miguel and Quiapo Esteros, and 8,458 cubic meters from the Provisor and Baleta Esteros.

One hundred and ninety-four thousand three hundred and forty-eight cubic meters of silt and mud were removed in the maintenance of the 18-foot channel in the lower Pasig River, 2,844 cubic meters were removed from around the post-office landing, and 115,860 cubic meters were dredged from the outer harbor.

Conditions in Manila Harbor, the Pasig River, and the esteros were very good at the close of the year, and during the fiscal year 1914 the improvement of the entire estero system as planned for navigation purposes should be completed, if funds can be provided to continue the work.

(b) *Vitas Jetties*.—A considerable amount of water traffic has for years been handled between Manila and Malabon through the Vitas and Malabon Esteros, necessitating a short passage exposed to the open bay between the adjacent mouths of these two waterways. In order to protect this traffic during bad weather, and to render the maintenance of the channel across the bar at the mouth of the Vitas Estero more easy, ₱20,000 were allotted by the undersigned for the construction of jetties. A contract for the project was made on May 20, 1913, and work to a total cost of ₱13,750.13 had been accomplished when it was necessary to suspend operations in the

month of June on account of storms. The heavy seas caused by one of these storms cut away a portion of the point on which the jetty abuts, and washed several hundred cubic meters of sand into the channel, but the director of navigation reports that had the uncompleted portion of the jetty not been in place the entire channel would have been completely obliterated.

(c) *Cavite Boulevard*.—In October, 1912, at the close of the typhoon season, the work of bringing the Cavite Boulevard retaining wall up to grade in the places where settlement had taken place was resumed, and was completed in January, 1913. Dredging in the bay, the material being used as fill for the boulevard, commenced in November, 1912, and was completed in April, 1913, 456,832 cubic meters of fill having been placed behind the wall. The total of all expenditures on this project to June 30, 1913, is ₱590,771.99.

(d) *Manila Port district*.—Only a comparatively small amount of work was accomplished in the port district. The roadways on Twenty-fifth Street, Muelle San Francisco, and Muelle Tacoma were widened approximately three meters each, at an approximate cost of ₱66,340, and the electric street railway has been extended along these streets as far as the intersection of Second and Tacoma Streets, thus connecting the street railway lines of the city with the two large insular government piers and the quartermaster dock. The street and storm-water system in the port district is now about sufficient for present needs, and its further extension will undoubtedly be only such as may be justified by the construction of new buildings. The total amount expended to June 30, 1913, for all roadways and storm-water drains in the port district is:

Roadways.....	₱123, 252. 75
Drains.....	46, 242. 54
Total.....	169, 495. 29

(e) *Pasig River and estero walls*.—Less than ₱6,000 were expended on the walls of the Pasig River and the city esteros during the year. This was used in constructing protective curbing at dangerous points to prevent wheeled vehicles from running over the edge into the stream, for the setting and resetting of mooring posts, and for the cutting of drains through the walls.

(f) *Steel piers 3 and 5*.—New launch landings have been constructed at the shore ends of both of the steel piers, three new cast-iron mooring posts were placed on Pier 5 and two on Pier 3. Roofs have been repainted, and a force of men under an American overseer has been continually engaged in maintenance work. Sixty-four fender piles broken during the year are now being replaced at a cost of ₱8,000. Much of this expense could be saved if the customs officials would discontinue the use of floating rafts to fend off vessels, practically all of the piles having been broken by such floating fenders.

(g) *Manila surveys*.—A complete and accurate resurvey of the Pasig River from its mouth to the Laguna de Bay was approximately 80 per cent completed and a resurvey of the more important esteros to fix channel limits was under way at the close of the fiscal year.

(h) *Mariveles Wharf*.—The temporary wooden wharf at the Mariveles Quarantine Station, which has been in bad condition for some time, is to be replaced with a permanent wharf of steel and concrete. The contract has been let and much of the preliminary work,

such as the fabrication of steel cylinders, has been completed. No work has yet been done on the ground. ₱100,000 are available for the project, with which it is anticipated 100 lineal meters of wharf can be constructed.

(i) *Cebu Wharf*.—The plain and reinforced concrete wharf at Cebu, which has been under construction since the latter part of 1911, was completed in June, 1913. The work was seriously hampered by the severe typhoons which visited Cebu in October and November, 1912, damaging the contractors' plant and injuring the lines of the Philippine Railway so that sand and gravel for concrete could not be transported for a time. The wharf as completed is 250 meters in length and will be available when the dredging in front of it is finished for vessels of 30-foot draft. It is an economical type of construction, containing less than half the concrete that would have been required for a gravity type retaining wall of the same height, and cost less per meter than the old wall constructed for vessels of 23-foot draft only. By it the wharfage of the port is increased from 667 to 917 lineal meters. The total cost of the work has been ₱302,498.40.

(j) *Iloilo Port works*.—The reinforced concrete wharf construction in progress along the right bank of the Iloilo River at the time of our last annual report was carried to its present completion at Point Llorente. It has a total length of 397 meters, which, added to the 241.5 meters of gravity section retaining wall formerly built, provides the port with 638.5 lineal meters of permanent wharfage, with 18 feet of water alongside at low tide.

On February 18, 1913, a ladder bucket dredge was sent to Iloilo to do the necessary maintenance dredging near the mouth of the river. She was operated until May 10, 1913, and removed 132,000 cubic meters of silt. The same dredge has made the excavation for a new wharf to be constructed in the upper river to serve a large warehouse district.

(k) *New Washington Wharf*.—A loan of ₱10,000 was granted by the Governor General in March, 1913, to the municipality of New Washington, Province of Capiz, for the construction of a wharf. This being but a small amount for the construction of a wharf of permanent materials, it was decided, after a study of the existing conditions, that the most economical type of construction suitable to such conditions at New Washington would be a reinforced-concrete sheet-pile bulk-head wall with back ties and back fill. Much delay and a considerable increase in cost was occasioned by the difficulty in obtaining labor and small craft for the transportation of sand for back fill locally. Assistance in this respect had been promised by local authorities, but was not forthcoming, so that the unit price for back fill has been higher than for similar work under similar natural conditions elsewhere, and the total cost of the project will slightly exceed the amount of the loan, though it will still be considerably less than the cost of a permanent wharf of equal length. An additional sum will be made available by the undersigned from allotment funds to complete the work in accordance with the plans.

(l) *Cagayan River improvements*.—The construction of pile hurdle training works was taken up early in the year by the combination dredge, snag boat, and pile driver placed in the Cagayan River during the last fiscal year. The only piles locally available at a reasonable cost are of *Palma brava*, and very inferior in quality for the work in

hand. Two hurdles, each approximately 500 meters in length, have been built about 300 meters apart across the newly formed narrow and tortuous channel immediately above the town of Camalaniugan for the purpose of closing the same and turning all of the water of the river into the more direct channel along the left bank to provide a suitable passage for inter-island vessels. To date, although the flood season is on, the damage to the hurdles has been small and the diverted waters are rapidly scouring the main channel out to a navigable depth.

A hurdle 100 meters long has been constructed near Aparri to correct the channel between the east bank and an island in the river. Fifty or sixty large snags and two dangerously large rocks were taken from the main channel above Lallo by blasting. At the beginning of the flood season, the dredge was placed in operation on the Linao-Abulug Canal, as it could not safely continue in the main channel.

(m) *Lighthouse construction.*—As during the previous year, but little new lighthouse construction was accomplished, operations being directed almost entirely to the work of maintaining and improving the existing system. One sixth-order occulting light on a 50-foot steel tower, with a complete new station, was established at Refugio Island, Province of Negros Occidental; a sixth-order port light with reinforced concrete beacon was placed at San Carlos, Occidental Negros, and an automatic acetylene flashing light buoy was anchored off Tomonton Point, Negros Occidental. Malapascua Light was changed from occulting to sixth order flashing and the three Manila Breakwater lights changed to automatic acetylene flashing lights with sun valves.

Twenty-three temporary structures of various types were replaced by new ones of permanent materials, and at the close of the year reconstruction was under way at three other points. Minor repairs, including those caused by the destructive typhoons in the latter part of 1912, were completed at 27 stations, and repairs were under way at three other stations on June 30.

It is the policy of the government to place the lighthouse system on a permanent basis as to structures as rapidly as possible by replacing all those buildings and towers, which were necessarily originally built of wood and other temporary materials, as fast as they reach the limit of economical repair, and except in cases of urgency no more temporary structures are being erected. With annual appropriations approximating those under which the division has been working for some time, such reconstruction should be completed in a few years.

LIGHTHOUSE MAINTENANCE DIVISION.

The number of lights in operation in the islands was increased from 145 to 146 by the establishment of a sixth-order occulting white light at Refugio Island, off the east coast of the island of Negros, on May 27, 1913. The characteristics of three lights were changed during the year. The force employed to maintain these lights, entirely Filipino, consists of 181 light keepers and assistants, 24 apprentices, and 81 boatmen. The services rendered by this force have been generally satisfactory, considering the frequency of inspection possible.

Two new buoys were placed, 1 discontinued, and 1 replaced by an acetylene gaslight buoy. There were on June 30, 1913, 106 buoys

in position, an increase of 1 during the fiscal year. The total amount expended for painting, overhauling, and repairing buoys was ₱8,777.67.

Five new beacons were erected and none discontinued, increasing the number in position to a total of 70 on June 30, 1913.

Each of the two lighthouse districts is provided with a lighthouse tender for the purpose of distributing supplies to the various stations for the transportation of materials of construction and repair, for the placing and maintenance of the buoyage system, and for the transportation of the inspector and other officers of the service on official inspections. The lighthouse tenders steamed 42,417 knots, consumed 2,832,871 kilos of coal, and visited 636 stations in the course of the year.

A school for light keepers is operated at Manila under the direction of an experienced keeper, and the apprentices in the school operate the semaphore station at bureau headquarters.

LEGISLATION.

By Act No. 2228, passed by the Legislature on February 8, 1913, provinces are authorized to use road and bridge funds, with the approval of the Governor General, for the purpose of subsidizing, or for acquiring, operating, and maintaining means of water transportation within the respective provinces or between them and adjacent islands, or to dredge rivers and provide facilities of communication and transportation by river. This enables those provinces, for the benefit of which means of water transportation are more urgently necessary at present than roads and bridges, to use accumulated road and bridge funds for the purpose.

Act No. 2242, passed by the Legislature on February 11, 1913, made retroactive, for the benefit of the commissioned officers in the service at the date of the passage of the act who had entered the service prior to June 27, 1905, the section in Act No. 1980 granting to commissioned officers an increase of 10 per cent in their current annual pay for each five years' service as such commissioned officers. This was in the nature of an act of justice to eight of the old officers who entered the service while Act No. 511, providing for a sliding increase of pay based on length of service, was effective, the said Act No. 511 having been repealed on June 27, 1905, thereby depriving them of benefits which formed much of the inducement for them to enter the service originally.

BUREAU OF POSTS.

C. M. COTTERMAN, DIRECTOR.

PERSONNEL.

There has been no change in the occupants of principal offices of the bureau organization. The Filipinization of this branch of the government service has progressed steadily and satisfactorily during the last 10 years, as is evidenced by the following figures:

On June 30, 1913, the total number of officers and employees on the rolls of the bureau was 2,530, representing an increase of 185.

Of the total number employed, 68 Americans and 238 Filipinos were in the classified civil service and 119 Americans and 2,105 Filipinos in the unclassified service. Following is a comparative statement of the number of American and Filipino officers and employees in the service, exclusive of mail carriers and contractors, at the close of each of the last 10 fiscal years:

	Ameri- cans.	Fili- pinos.	Total.
June 30—			
1904.....	197	380	577
1905.....	156	456	612
1906.....	223	780	1,003
1907.....	210	881	1,091
1908.....	237	1,128	1,365
1909.....	201	1,166	1,367
1910.....	191	1,380	1,571
1911.....	194	1,704	1,898
1912.....	190	1,858	2,048
1913.....	179	2,047	2,226

POSTAL DIVISION.

(a) *Post offices*.—The number of post offices in operation was increased from 587 on June 30, 1912, to 590 on June 30, 1913.

(b) *Free-delivery service*.—Forty-two additional municipalities were provided with free-delivery letter carrier service, making a total of 439 municipalities outside of the city of Manila in which such service is rendered. The cost of this service outside of the city of Manila was ₱84,071.20, an increase of ₱16,979.72 as compared with the previous fiscal year.

Two million six hundred eighteen thousand two hundred and sixty-two pieces of mail, representing an increase of 27 per cent, were delivered, and 2,269,630 pieces of mail, representing an increase of more than 26 per cent, were collected from street letter boxes by letter carriers in the city of Manila. Fifteen thousand six hundred and thirty-seven articles bearing special-delivery stamps were delivered by special messengers in the city of Manila.

(c) *Metric weights and measures*.—Effective on January 1, 1913, the metric system of weights and measures was adopted for the Philippine postal service, and the increased weights of mail handled without increase in postal rates has resulted in a reduction of postal revenues during the six months to June 30, 1913, of approximately ₱30,000. The unit of weight for first-class mail matter for delivery within the islands and to foreign countries was increased from one-half ounce (less than 15 grams) to 20 grams, and the third and fourth classes of mail matter for delivery within the islands were consolidated, with a reduction of the rate of postage on what was formerly fourth-class matter. It is the opinion of the director of posts, however, that the reduction in the rate of postage on merchandise for delivery within the islands from 2 centavos for each ounce, with a limit of weight of 4 pounds, to 12 centavos for each half kilo or fraction thereof, with a limit of weight of 5 kilos, will, within a reasonable time, cause an increase in the amount of this class of matter handled which will offset the present loss of revenues.

(d) *Collect-on-delivery service*.—Another new regulation, placed in effect on January 1, 1913, provides a collect-on-delivery service to meet the requirements of persons who wish to pay at the time of their receipt for articles sent to them through the mails, and to accommodate merchants and others who wish to recover through the post office the charges on articles furnished by them. During the six months the service has been in operation 1,283 such packages, involving collections to a total amount of ₱19,853.73, were handled.

(e) *United States parcel post*.—An increase of 10 per cent in the amount of merchandise received from the United States through the mails is directly traceable to the establishment of the parcel post service in the United States on January 1, 1913. Every mail from the United States indicates that the service is growing in popularity.

(f) *Second-class publications*.—Seventeen new publications were listed as second-class mail matter, and permits to mail publications at the second-class rate of postage were issued to 2 news dealers, and 26 second-class publications and 2 news dealers were discontinued, leaving at the close of the year 68 second-class publications and 7 news dealers having the second-class postage privilege registered at Manila. The amount of second-class postage paid was ₱15,998.79, representing an increase of 16 per cent over the previous fiscal year.

(g) *Registered mail handled*.—The following is a comparative summary of registered mail handled in the bureau during the fiscal years 1912 and 1913:

	Fiscal year 1912.	Fiscal year 1913.
Number of pieces of mail registered at Philippine offices.....	535,137	617,876
Number of pieces received from United States.....	67,151	51,031
Number of pieces received from foreign countries.....	74,124	72,425
Number of pieces sent to the United States.....	73,728	72,722
Number of pieces sent to foreign countries.....	50,284	47,143
Number of pieces sent from one Philippine office to another Philippine office.....	411,125	498,011
Number of pieces handled by the Manila post office.....	633,910	650,805

(h) *Inland-mail transportation*.—At the close of the fiscal year there were 961.7 kilometers of railway-mail service in operation. Mails were carried 935,061.7 kilometers by railroad, exclusive of electric railroads, at a total cost of ₱66,264.70, or an average cost of ₱0.0709 per kilometer. Between Manila and Fort McKinley and Pasig mails were carried over the lines of the Manila Electric Railroad & Light Co. and the Manila Suburban Railways Co., a total of 19,797.6 kilometers, at a total cost of ₱740.37, or an average of ₱0.037 per kilometer.

During the year 320 post routes, over which mails were carried by launch, automobile, wagon, on horseback, and on foot, were operated at a total cost of ₱86,895.77. The total number of kilometers covered in this manner was 1,579,614, at an average cost per kilometer of ₱0.055.

The cost of handling mail between the post office and mail boats, or mail trains, at Manila was ₱24,712.69.

(i) *Exchange of mails with the United States.*—

	Fiscal year 1912.	Fiscal year 1913.
Number of arrivals from the United States.....	86	81
Number of pouches letters received from the United States.....	925	973
Number of pouches registers received from the United States.....	4,375	3,597
Number of sacks papers and merchandise received from the United States.....	19,449	21,361
Number of Philippine mails arrived in the United States.....	69	73
Number of pouches letters sent to the United States.....	1,152	973
Number of pouches registers sent to the United States.....	2,076	2,722
Number of sacks papers and merchandise sent to the United States.....	3,108	2,945
Number of bags sent to United States ships and transports in foreign countries.....	1,455	1,250
Number of bags received from United States ships and transports in foreign countries.....	573	621

(j) *Dead letter office.*—Eighty-two thousand eight hundred and eighty-three articles received in the dead letter office at Manila were disposed of as follows:

Returned to the United States.....	13,785
Returned to foreign countries.....	6,142
Request matter returned to senders in the Philippines.....	4,588
Opened and returned to senders.....	32,350
Containing money, drafts, stamps, and other valuable matter, returned to senders.....	206
Filed, containing money, drafts, stamps, and other valuable matter.....	407
Destroyed.....	25,405
Total.....	82,883

On June 30, 1913, there were on file in the dead letter office 318 registered articles and 41 letters containing money, drafts, or stamps, and 1,120 letters and packages containing other valuables. Money to the amount of ₱167.50 was taken from letters which had been on file more than one year and turned into postal revenues as miscellaneous receipts.

(k) *Advertised mail.*—Thirty thousand and thirty-one pieces of mail were advertised in Manila, of which 2,496 pieces were subsequently delivered, the balance being turned in to the dead letter office for disposition.

MONEY-ORDER DIVISION.

(a) *Extension of service.*—Money-order service was established at 22 additional offices, making a total of 275 money-order offices in the Philippine Islands on June 30, 1913.

(b) *Orders issued and paid.*—The following is a comparative statement of the business handled in the fiscal years 1912 and 1913:

	Fiscal year 1912.	Fiscal year 1913.
Amount of orders issued payable in the Philippines.....	₱11,184,401.70	₱12,848,999.08
Amount of orders issued payable in the United States and possessions...	3,550,790.74	3,556,645.40
Amount of orders issued for payment in other countries.....	115,154.96	137,560.24
Amount of orders of the United States and other countries paid in the Philippines.....	429,078.94	519,118.14
Amount of Philippine orders paid in the United States and other countries.....	3,613,435.28	3,265,816.68
Deposits of money order funds received at Manila from provincial offices..	9,302,866.84	10,067,750.52

The total number of all orders issued was 271,772, an increase of 40,412, or 17.5 per cent. The total fees amounted to ₱92,806.94, from which ₱308.41 was deducted to pay the cost of bank exchange in settlements of balances due Hongkong.

(c) *Telegraphic transfers*.—Nine thousand one hundred and ninety-one telegraphic transfers of funds were made by means of the money-order service, amounting to ₱2,288,557.18, upon which the money-order fees amounted to ₱8,138.97, and ₱10,658.60 was paid for the telegrams required to make the transfers.

(d) *Business with Hongkong*.—Five hundred and twenty money orders were issued in the Philippine Islands, payable in Hongkong, amounting to ₱29,080.80, and 118 orders were issued in Hongkong, payable in the Philippines, amounting to ₱3,442.24.

TELEGRAPH DIVISION.

(a) *Telegrams handled*.—A total of 687,307 telegrams were handled by the telegraph division during the fiscal year, on which charges to the amount of ₱565,741.78 were collected. The number of commercial telegrams increased 6.5 per cent, and the amount of revenues derived therefrom increased 18.9 per cent. United States Government business decreased 62.6 per cent in number of telegrams handled and 34.4 per cent in the amount paid for the same. Insular, provincial, and municipal government business decreased about 2 per cent, but there was a slight increase in receipts from this service over the previous year of less than eight-tenths of 1 per cent.

(b) *Zone rate system*.—On January 1, 1913, a zone system of rates for the telegraph service of the bureau of posts was made effective throughout the islands to replace the former flat charge of ₱0.06 per word for any telegram sent between any two points in the islands. The necessity for a system of rates based more equitably on the actual value of service rendered had been apparent for some time, and with the installation of wireless stations at distant points at a high annual cost for maintenance and operation the question was brought to a determination. Considerable opposition to the installation of the system was at first manifested, and several bureaus of the government of the Philippine Islands, on representations made that the change would result in large increased cost to them, secured material increases in the amounts allotted them for current expenses to take care of the same, an amount equal to the increases granted them having been deducted from the allotment for the bureau of posts. One bureau was given ₱60,000, another ₱10,000, and four other bureaus ₱2,000 each, and the amount of funds allotted to the bureau of posts was decreased ₱78,000 to offset the total of these increases. It has worked out in actual practice that the total increase in cost to all branches of the insular, provincial, and municipal governments, including the six bureaus above referred to, amounted to but ₱31,029.

(c) *Transmission lines and offices*.—109.48 kilometers of new telegraph lines were built and 162.621 kilometers of new cable lines laid. 890.56 kilometers of existing telegraph lines were reconstructed and 82.10 kilometers of telephone lines converted into telegraph.

On June 30, 1913, the total kilometerage of telegraph and cable lines under the jurisdiction of the Bureau of Posts was 9,327.411, and the number of telegraph offices in operation on the same date was 290, 23 new offices having been established and 3 offices discontinued in the course of the fiscal year.

(d) *Wireless stations*.—New wireless stations were constructed and opened for business at Cuyo, Puerto Princesa, and San José, Mindoro. The power of the station at Malabang was materially increased by the installation of new and improved apparatus, and a new concrete building to accommodate both the wireless plant and the post office was constructed. At Zamboanga new and more powerful apparatus was installed, and the station now works regularly, by day as well as by night, with the stations at Davao, Malabang, Jolo, Puerto Princesa, and Cuyo. The Zamboanga station was not out of communication at any time during the fiscal year.

(e) *Telegraph school*.—One hundred and fifty-seven Filipino students were admitted to the telegraph school during the year, 91 were assigned to stations, 6 were dismissed, and 20 resigned. The enrollment of the school on June 30 was 59.

POSTAL SAVINGS BANK DIVISION.

(a) *Summary of the year's business—*

	Fiscal year 1912.	Fiscal year 1913.
Number of bank offices at close of year:		
First class.....	39	39
Second class.....	267	269
Third class.....	131	129
Total.....	437	437
Depositors:		
New accounts opened.....	12,442	9,854
Accounts closed.....	5,444	5,747
Open accounts June 30.....	35,802	39,909
Increase over prior year.....	6,998	-4,107
Deposit account:		
Number of deposits made.....	61,641	56,387
Number of withdrawals.....	29,064	32,075
Amount of deposits made.....	P3,106,419.23	P2,959,875.80
Average amount of each deposit.....	50.39	52.49
Amount of withdrawals.....	2,816,907.30	2,905,624.30
Average amount of each withdrawal.....	96.92	90.58
Net deposits at end of year.....	2,388,986.42	2,480,482.37
Average amount of each open account at close of year.....	66.73	62.15
Stamp account:		
Savings bank stamps redeemed.....	21,346.00	17,161.00
Savings bank stamps sold.....	22,444.35	16,934.60
Savings bank stamps outstanding.....	7,457.40	7,231.00
Income:		
Earnings for year collected during year.....	90,626.20	88,151.31
Accrued earnings uncollected at close of year.....	25,569.53	35,237.92
Expenditures:		
Operating expenses.....	81,523.71	84,309.49
Interest paid on closed accounts.....	7,528.23	6,869.49
British income tax paid on Manila Railroad Co. bonds.....		449.02
Interest added to accounts at close of year as deposits.....	34,116.81	37,244.45
Net deficit.....	6,973.02	5,483.22

(b) *Classification of depositors—*

	Open accounts, June 30—	
	1912	1913
As to nationality, etc.:		
Americans.....	4,720	5,223
Filipinos.....	29,555	32,906
Europeans.....	886	1,036
Asiatics.....	590	684
(Societies).....	51	60
Total.....	35,802	39,909
As to sex:		
Male.....	27,480	30,951
Female.....	8,271	8,898
As to marriage relation:		
Married.....	7,985	9,600
Unmarried.....	27,766	30,249

(c) *Investments—*

	June 30, 1912.	June 30, 1913.
Time deposits in Manila banks, at 3½ per cent.....	P560,000.00	P580,000.00
4 per cent railway and municipal bonds.....	1,288,875.50	1,288,875.50
Real estate mortgages, at 8 and 10 per cent.....	509,680.00	623,798.50
Total.....	2,358,555.50	2,492,674.00

(d) *General remarks.*—The gain in Filipino depositors with open accounts at the close of the year was over 11.3 per cent. More than 82.5 per cent of all depositors are Filipinos. In number, 20.8 per cent less new accounts were opened during the fiscal year 1913 than during the fiscal year 1912, and the number of accounts closed during the year increased 5.6 per cent. Accounts open at the end of the year having balances of less than P50 each amount to 78.8 per cent of all accounts. The earnings of the bank increased 6.2 per cent and the expenses 3.4 per cent.

OFFENSES AGAINST THE SERVICE.

Investigations by district inspectors were made of the following cases:

Fifty depredations on registered mail, involving P1,589.91; 74 depredations on ordinary mail of a known value of P931.20; loss or mistreatment of 38 ordinary parcels and of 41 ordinary letters of no intrinsic value.

In addition, there were 18 cases of misappropriation of public funds; 8 cases of faithlessness in the custody of documents; 4 cases of robbery of post offices; 15 cases of estafa; 1 case of swindling; 1 case of violation of the mails; 1 case of bribery; 1 case of robbery, and 1 case of revelation of secrets. Twelve cases were carried over from the previous fiscal year, making a total of 265 cases handled.

Convictions have been secured in the following cases: Ten postmasters and 1 lineman for misappropriation of public funds; 2 clerks,

1 letter carrier, and 1 mail messenger for faithlessness in the custody of documents; 1 postmaster, 1 clerk, and 1 lineman for estafa, and 1 letter carrier for hurto. Twelve persons not in the service were convicted of estafa, and 1 of robbing the mails. Fifteen cases were pending before the courts on June 30, 1913; 8 employees other than those prosecuted were dismissed from the service for actions involving dishonesty, and 7 employees were required to make reimbursement for losses of registered mail made possible by their carelessness or failure to comply with the regulations. Eleven unfinished cases were under investigation on June 30, 1913.

HEADQUARTERS BUILDING AND POST OFFICE.

The recommendation contained in the last annual report of this office is again submitted. Conditions with respect to the post office building at Manila have certainly not improved during the year, and it is becoming a favorite topic for many local quips.

FINANCES.

(a) *Revenues (exclusive of postal savings bank)*—

	Fiscal year 1912.	Fiscal year 1913.
Postal division.....	P698,813.10	P761,885.05
Money-order division.....	82,437.24	92,498.53
Telegraph division.....	474,199.06	566,609.59
Total.....	1,255,449.40	1,420,993.17

(b) *Expenditures (exclusive of postal savings bank)*—

	Fiscal year 1912.	Fiscal year 1913.
Plant and equipment.....	P317,358.24	P161,718.3
Administration.....	1,301,426.86	1,414,468.42
Maintenance.....	462,192.77	455,038.24
Supplies on hand June 30.....	64,391.10	(-86,912.27)
Total.....	2,145,368.97	1,944,312.42

The above figures indicate a gain of 9 per cent in the revenues of the postal division; 12.2 per cent in the money-order division, and 19.5 per cent in the telegraph division. Total revenues were 13.2 per cent more than in the fiscal year 1912, and the cost of operation and maintenance was decreased 2.5 per cent.

BUREAU OF COAST AND GEODETIC SURVEY.

CAPT. P. A. WELKER, DIRECTOR.

PERSONNEL.

The personnel of this bureau remained practically unchanged during the entire year, and consisted of a field force of 30 officers, 10 recorders, 217 petty officers, seamen, firemen, tide observers, and messmen, a total of 257, and an office force of 50.

FIELD OPERATIONS.

The five steamers of the service, namely, the *Pathfinder*, *Fathomer*, *Romblon*, *Marinduque*, and *Research*, were constantly in the field, except during the intervals while undergoing repairs.—There was also one shore party engaged for seven and one-half months in making observations for the determination of the magnetic elements in various parts of the islands.

(a) *Triangulation*.—During the year there was attained the completion of the most extensive and probably the most important trigonometrical survey that has been executed in the Philippine Islands, consisting of the triangulation over the large water area bounded by Luzon, Burias, Masbate, Panay, and Tablas, thence extending via Mindoro and Panay across the Cuyos to the Calamianes and Palawan, thence northward over Apo Reef and Verde Island Passage to a connection with the work in the Lubang Islands which had been previously executed. This work involved lines of 91 statute miles (146 kilometers) in length, the longest that will be required for any surveys in the Philippine Islands, and has been in progress during the past two years.

Additional triangulation, in connection with the topographic and hydrographic surveys, was executed in various other localities: in Mindanao, a difficult piece of triangulation was carried across the mountains between Davao Gulf and Pujada Bay and extended, thence, along the east coast of the island as far south as Cape San Agustin, and north to Baculin Point; on the west coast of Negros from Binalbagan to Sijoton Point; on the north coast of Palawan and throughout a considerable section of the Calamianes; also off the south coast of Masbate and the area between Masbate and Samar.

(b) *Topography*.—Topographic work was executed on the east coast of Mindanao, west coast of Negros, south and east coast of Masbate, northwest coast of Samar, west shore of Ragay Gulf, west coast of Mindoro, over the entire area of the Lubang Islands, and over a considerable portion of the Calamianes.

(c) *Hydrography*.—Hydrographic surveys were made off the east coast of Mindanao, west coast of Negros, south and east coasts of Masbate, northwest coast of Samar and San Bernardino Strait, Ragay Gulf, and very extensively over the northern part of the Sulu Sea, and the region between the Cuyos, the Calamianes, Apo Reef, west coast of Mindoro, Verde Island Passage, and the Lubang Islands.

(d) *Magnetic survey*.—The magnetic survey of the Philippine Islands which was in progress at the close of the previous fiscal year, was completed on February 21, and the observer returned to the United States.

MANILA OFFICE.

(a) *Computing division*.—Four hundred and sixty-three survey records were received by this division, distributed as follows:

Triangulation.....	73
Hydrographic.....	256
Tidal.....	92
Magnetic.....	42
Total.....	463

During the year the adjustment of the triangulation over the large area bounded by Panay, Mindoro, Luzon, and Masbate was completed and also the triangulation over the area between Mindanao, Negros, Bohol, and Leyte.

This division has maintained a general inspection over the results of the field work of the triangulation, made special studies for the preparation of instructions for new triangulation and astronomical work, and answered requests for survey data and miscellaneous information.

(b) *Drafting division*.—During the year 95 original topographic and hydrographic sheets were received from the field parties, making a total of 1,077 received since the date of the commencement of the surveys in the islands. Of this number, 237 remain at the Manila office and 840 have been forwarded to Washington.

Twenty-one tracings for the publication of charts and maps were completed and forwarded for printing. They consisted of 12 new charts, 1 new edition, 5 correction pieces, and 3 new maps. At the close of the fiscal year there were in preparation 10 chart drawings, consisting of 6 new charts and 4 new editions.

The table of distances between ports of the Philippine Islands was revised and a new edition was issued.

(c) *Nautical division*.—This division revised and published during the year Sections I and V of the Philippine Islands Sailing Directions; prepared and published five notices to mariners; a large quantity of original hydrographic information was received and filed by the division; all the lights and buoys were colored and necessary hand corrections were made on the published charts received from the Washington office. A list of the publications issued by the division during the year follows:

Charts issued:

To agents.....	1, 081
To military authorities.....	469
To naval authorities.....	482
To civil authorities.....	803
To Coast and Geodetic Survey vessels.....	151
To Coast and Geodetic Survey suboffice.....	132
To miscellaneous parties.....	107
Sold for cash.....	1, 855
Returned to Washington.....	250

Total.....	5, 330
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Tide tables:

Issued for official use.....	94
Agents.....	47
Sold for cash.....	52

Total.....	193
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Nautical almanacs:

Sold for cash.....	97
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Miscellaneous:

Sailing directions issued.....	979
Catalogues issued.....	214
Notices to mariners issued.....	5, 600

(d) *Geographical division*.—The finished results of this division during the past year were the most satisfactory of any since its organization in 1907. The maps completed were as follows:

Map No. 17, "Islands of Panay," shows all topography on Panay, Guimaras, and adjacent small islands and coast line of northwestern Negros.

Map No. 7, "Southern Luzon (western sheet)," shows Manila and Subic Bays, Verde Island Passage, the lake region and part of Pacific coast, including Atimonan.

Map No. 5, "Central Luzon," shows entire valley of central Luzon, including Baguio on the north and Manila Bay on the south.

Map No. 11, "Tablas, Romblon, and Sibuyan Islands," includes all islands of Romblon Subprovince and east coast of Mindoro with adjacent small islands.

Map No. 3, "Northern Luzon," includes that portion of Luzon north of Dagupan and between the Cagayan River and the China Sea.

MISCELLANEOUS.

(a) *Tidal observations.*—In addition to the necessary tidal observations made in connection with the hydrographic surveys, long series of continuous observations from self-registering gauges were obtained at various localities, during the progress of the field work. The self-registering gauge at Manila was in constant operation during the entire year.

(b) *Geographic names.*—During the fiscal year there was great progress in the compilation of the list of Philippine geographic names. This list has grown to about 55,000 names and it is estimated that the remaining names of approximately 1,500 will be obtained during the coming year. The revision and tabulation of this list is in progress and its publication for universal use is contemplated.

PROGRESS.

During the year there was excellent progress, although there was much loss of time, owing to the unusual frequency of typhoons and the extraordinary repairs required by two of the steamers. The *Marinduque* was stranded on the coast of Palawan during a typhoon on November 6, resulting in extensive repairs, requiring 2½ months in excess of the average time required for annual repairs; and the *Pathfinder* was at Hongkong undergoing extensive repairs for five months, an excess of three months over the average time.

The following is a summary of the results obtained in the field during the year:

Reconnaissance:

Area.....	square miles..	1, 018
Stations selected.....		14
Lines of visibility determined.....		33

Triangulation:

Area covered.....	square miles..	12, 916
Signals and scaffolds erected.....		184
Stations occupied (horizontal angles).....		145
Geographical positions determined.....		316
Magnetic stations occupied.....		30
Base lines measured.....		1
Azimuth stations occupied.....		1

Topography:

Area covered.....	square miles..	923
Detailed coast line surveyed.....	miles..	945
Rivers and creeks surveyed.....	do....	147
Roads surveyed.....	do....	131
Topographic sheets completed.....		32½

Hydrography:

Area sounded.....	square miles..	10, 604
Run while sounding.....	miles..	22, 288
Soundings made.....	number..	239, 868
Tidal stations established.....		28
Hydrographic sheets finished.....		47 $\frac{1}{2}$
Days in the field.....		1, 304

The number of miles of detail or actual shore line surveyed during the past nine years is as follows:

1905.....	494	1910.....	1, 637
1906.....	626	1911.....	1, 229
1907.....	1, 495	1912.....	1, 316
1908.....	1, 537	1913.....	945
1909.....	1, 017		

The number of miles of hydrography run during the same period is:

1905.....	7, 573	1910.....	19, 208
1906.....	11, 457	1911.....	23, 432
1907.....	23, 339	1912.....	25, 297
1908.....	24, 454	1913.....	22, 288
1909.....	22, 552		

For reference in relation to general progress the following information is furnished:

Approximate total length of general coast line of the Philippine Islands.....	11, 511
Approximate total length of coast line surveyed to June 30, 1912 (57.8 per cent).....	6, 658
Approximate total length of coast line surveyed during the fiscal year 1913 (5.2 per cent).....	605
Approximate total length of general coast line surveyed to June 30, 1913 (63 per cent).....	7, 263
Number of miles of detailed shore line surveyed during the fiscal year 1913..	945
Total length of detailed shore line surveyed to June 30, 1913.....	12, 253
Number of miles of soundings run during the fiscal year 1913.....	22, 288
Total number of miles of soundings run to June 30, 1913.....	195, 164
Number of square miles of hydrography surveyed during the fiscal year 1913..	10, 492
Total number of square miles of hydrography surveyed to June 30, 1913....	76, 709

At the close of the fiscal year 1913, 63 per cent (exclusive of Spanish and British surveys) of the entire general coast line of the Archipelago has been surveyed, compared with 57.8 per cent at the close of the fiscal year 1912, an advance of 5.2 per cent.

COST.

The actual cost of the bureau can not be accurately given at the present time, as the service has been working under a general plan in relation to the division of its expenses between the United States Government and the government of the Philippine Islands, and a statement from the Washington office is not now available. The cost of the bureau to the government of the Philippine Islands during the year has been ₱203,116, a decrease of about ₱3,000 over the previous year.

BUREAU OF LABOR.

MANUEL TINIO, DIRECTOR.

PERSONNEL.

The director was in charge of the bureau during the entire year. The number of employees was increased by two clerks, one in the Free Employment Agency in Iloilo and another in the agency in Cebu.

EMPLOYMENT AGENCIES.

The business of the agencies increased nearly 100 per cent during the year, as shown in the following tabulation:

Free employment agencies.	1912			1913		
	Laborers.		Per-centage placed.	Laborers.		Per-centage placed.
	Regis-tered.	Placed.		Regis-tered.	Placed.	
Manila.....	2,986	1,759	58.90	2,453	1,146	46.71
Cebu.....	2,771	2,185	78.84	5,680	4,711	82.94
Iloilo.....	1,729	736	42.56	2,582	1,995	77.22
Ilocos Sur.....	370	162	43.78	715	448	62.65
Total.....	7,856	4,842	61.64	11,430	8,300	72.61

The causes of these increases have been, principally, the establishment of agricultural colonies and railroad construction. Many laborers were placed on the railroad line in southern Luzon by the Cebu and Iloilo agencies. In addition to the two factors in the increase of the business mentioned, the knowledge of the existence of these offices and of the assistance they can be to those seeking employment is becoming more general, and advantage is being taken of these services. Of the 8,300 laborers placed, 5,799 were "emigrants" to other parts of the islands; 3,560 of the number were located by the Cebu agency; 1,440 by the Iloilo agency; 449 by the Ilocos Sur agency; and 350 by the Manila agency. Two hundred and forty-four laborers were transported during the year at the expense of the bureau from densely populated districts to localities where work was to be had without the bureau's intervention in the obtaining of employment.

STRIKES.

There were 11 strikes during the year, 5 of which occurred in cigar and cigarette factories in the city of Manila, and were taken part in by 2,204 employees. Of the remaining 6 strikes 2 occurred on provincial public works in Ilocos Sur; 2 in commercial establishments in Cebu and 2 in Ilocos Sur. The total number of strikers was 2,880. Refusal to grant an increase in wages was the cause in 8 instances of the wage earners quitting work. Six of the strikes were settled by the strikers withdrawing their demands and 2 by the employers

granting a small increase in wages. One strike lasted 42 days; two, 30 days; one, 19 days; one, 16 days; one, 3 days; and four, 1 day. It is gratifying to note the decrease in the number of strikes as compared with the preceding year. In 1912, there were 20 strikes; in 1913, 11, a decrease of 45 per cent, which may be taken as indicative of better relations existing between employers and employees.

In the foregoing the general strike of cigar makers which occurred in Manila in October, 1912, is not included, as it did not arise from a difference between employers and employees, but because the latter refused to comply with an order of the Collector of Internal Revenue that they register.

LABOR ACCIDENTS.

During the year there were 170 labor accidents reported to the bureau, affecting 190 persons. Of this number 45 were fatally injured, 12 were permanently and 133 temporarily injured. The record of labor accidents as shown by the bureau is not complete, as many must occur which are not reported because of municipal officers not being aware of instructions calling for such reports. Efforts are being at present made to have the reports on labor accidents for the islands more complete.

CLAIMS.

Eight hundred individuals have, during the year, requested the bureau to settle their claims for wages due. The amount involved was ₱15,087.16. Through the efforts of the bureau ₱7,918.96 were obtained for the claimants. The claims decided against claimants amounted to ₱3,123.76. The amount of claims now outstanding represent ₱4,044.44. There was a decrease in the claims presented over the previous year of 10 per cent, and an increase of amount recovered of 294 per cent.

AGRICULTURAL COLONY ACT.

The Philippine Legislature on February 11, 1913, enacted Act No. 2254, known as the "Agricultural colony act," and appropriated ₱400,000 for the purpose of carrying it into effect. The objects sought to be obtained by this act were (a) to increase the production of food cereals; (b) to equalize the distribution of population of the islands; and (c) to afford opportunity to the inhabitants of the islands to become landed proprietors and to bring under cultivation the rich public lands of the islands which are now sparsely populated. The bureau is taking a very active part in recruiting and locating these colonists.

COST.

The cost of operation of the bureau during the fiscal year was ₱45,073.16, or ₱5,397.36 less than the preceding year. Of the amount spent ₱29,230.54 was for salaries and wages, a slight increase over that of the preceding year.

OFFICE OF THE SUPERVISING RAILWAY EXPERT.

L. F. GOODALE, SUPERVISING RAILWAY EXPERT.

PERSONNEL.

No changes have been made during the year in the staff employed. One inspecting engineer, Mr. W. V. Van Blarcom, returned from leave and was assigned to the inspection of the Baguio section of the Manila Railroad North, with headquarters in Baguio.

LEGISLATIVE OR ADMINISTRATIVE ACTS AFFECTING RAILROADS.

Manila Railroad Co.—On August 1, 1912, the line from Magdalena to Pagsanjan, Laguna, was placed in full commercial operation under authority granted by the Acting Governor General. On February 10, 1913, the line from Tiaon to Lucena, Tayabas, was likewise placed in full commercial operation under similar authority.

Surveys of the Baguio Line proved that the best place for the junction of that branch line with the main line was at Aringay, Union. There was no "existing railroad" at that point at the time and the law provided that the Baguio Line of the Manila Railroad begin at "some point authorized on the existing railroad." The Governor General approved of Aringay as the starting point of the Baguio Branch, which approval the Secretary of War ratified on December 9, 1912.

Philippine Railway Co.—The time for the completion of the Philippine Railway line in Negros and the branch from Dao to Batan Bay in Panay was extended by the Governor General on June 24, 1913, "until such time as the Legislature shall have acted in the matter or until such time as both parties to the contract shall desire its fulfillment."

Manila Electric Railroad & Light Co.—On January 13, 1913, the Manila Electric Railroad & Light Co. was authorized by city ordinance to extend its electric line around the new port works to the south bank of the Pasig River and along the bank to the Intendencia Building, where it would join with the existing line.

GENERAL LEGISLATION.

Act No. 2243, passed by the Legislature on February 11, 1913, provides that "mortgages executed by railway companies, tramway companies, street-car companies, sugar-central companies, and other corporations owning and operating railroads or tramways, as well as all public-service corporations, for the purpose of securing bonds of such corporations on the property of such corporations, shall become liens on all the property of such corporations."

RAILROAD CONSTRUCTION AND OPERATION.

MANILA RAILROAD CO.

During the fiscal year 1913 the Manila Railroad Co. graded 119.8 kilometers, laid track on 86.6 kilometers, and put in operation 35.4 kilometers. The grading on the Baguio Line north has been carried

on for practically the entire length of the line and should be completed in the early part of the year 1914.

(a) *Main line south*.—Grading work on this line has progressed rapidly, and the line has generally been opened up, the railroad having continuously a large force at work. Track laying on the road east of Lucena has been delayed some because of lack of suitable ballast, but a pit has been recently opened up which will permit more rapid advance. A great deal of the heavy work near Hondagua is reaching completion, and track laying each way from Legaspi is close up with the grading. The main line south has been definitely located except from the Viñas River to Nueva Caceres, subject to a few minor changes.

(b) *Bond issues*.—There has been a total bond issue authorized on guaranteed lines of \$6,311,000 United States currency.

The government has paid out on these bonds ₱888,777.78, of which ₱854,910.77 has been refunded. The balance due, ₱33,867, may not be refunded until the end of the guaranty period. The net earnings have been sufficient to pay fixed charges and leave a surplus to be disposed of by the directors of the company.

(c) *Operation—Northern lines*.—

	Calendar year.		Increase (+) or decrease (—)
	1911	1912	
Average operated kilometerage.....	441.7	473.0	+ 31.3
Operating revenue.....	₱2,833,147.81	₱2,925,171.04	+ ₱92,023.23
Operating expenses.....	1,257,158.20	1,306,895.16	+ 49,736.96
Net operating revenue.....	1,575,989.61	1,618,275.88	+ 42,286.27
Taxes.....	28,524.65	31,823.09	+ 3,298.44
Operating income.....	1,547,464.95	1,586,452.79	+ 38,987.83
Income from other than transportation.....	354,239.95	334,479.92	— 19,760.03
Gross income.....	1,901,704.91	1,920,932.71	+ 19,227.80
Deductions from gross income:			
Interest on funded debt.....	1,599,840.00	1,599,840.00	
Other interest.....	101,144.80	125,361.04	+ 24,216.24
Total deductions from gross income.....	1,700,984.80	1,725,201.04	+ 24,216.24
Net corporate income.....	200,720.11	195,731.67	— 4,988.44
Percentage of operating expenses to gross operating revenue.....	45.0	44.7	— 0.3

The equipment on this line was as follows:

	1911	1912	Increase (+) or de- crease (—).
Locomotives.....	64	64	.....
First-class passenger cars.....	8	8	.....
Second-class passenger cars.....	10	10	.....
Third-class passenger cars.....	76	76	.....
Combination passenger cars.....	28	32	+4
Parlor cars.....	1	1	.....
Baggage, express, and postal cars.....	33	33	.....
Freight cars.....	770	770	.....
In company's service.....	127	127	.....

(d) *Operation—southern lines.*—On December 31, 1912, the kilometerage of the southern lines in operation had increased to 275.3, as compared with 253.2 on the preceding year. The result of the operation is as follows:

	Calendar year.		Increase (+) or decrease (—).
	1911	1912	
Average operated kilometerage.....	128.8	247.7	+ 118.9
Operating revenue.....	P761,850.16	P1,443,042.57	+ P681,192.41
Operating expenses.....	352,583.63	751,882.31	+ 399,298.68
Net operating revenue.....	409,266.53	691,160.26	+ 281,893.73
Net revenue from outside operations.....	4,487.13	.....	— 4,487.13
Total net revenue.....	413,753.66	691,160.26	+ 277,406.60
Taxes.....	8,124.18	13,914.29	+ 5,790.11
Operating income.....	405,629.48	677,245.97	+ 271,616.49
Other income.....	248,839.61	269,845.60	+ 21,005.99
Gross income.....	654,469.09	947,091.57	+ 292,622.48
Deductions from gross income:			
Rent of joint facilities.....	27,329.21	45,951.15	+ 18,621.94
Interest on funded debt.....	229,703.20	407,498.80	+ 177,795.60
Other interest.....	242,676.93	260,868.72	+ 18,191.79
Total deductions from gross income.....	499,709.34	714,318.67	+ 214,609.33
Net corporate income.....	154,759.75	232,772.90	+ 78,013.15
Percentage of operating expenses to gross operating revenue.....	46.3	52.1	+ 5.8

	1911	1912	Increase.
Locomotives.....	26	26	.....
First-class passenger cars.....	.....	2	2
Third-class passenger cars.....	28	28	.....
Combination first and second class passenger cars.....	7	7	.....
Baggage, express, and postal cars.....	.....	5	.....
Other cars in passenger service.....	22	17	.....
In freight service.....	241	447	206
In company's service—freight.....	124	127	3

PHILIPPINE RAILWAY CO.

(a) *Construction.*—Only a small amount of work chargeable to construction has been executed during the past year, the principal items bonded being amounts expended in closing up right-of-way matters on Panay and Cebu and surveys on the island of Negros and for proposed branch lines on the islands of Panay and Cebu. Authority for the final issue of bonds will probably be given within the next month (August, 1913). Certificates for bond issues have been made for a total of \$8,543,000 United States currency on all lines. It will be observed that the cost of the line in the island of Panay is P87,938 per kilometer, or \$70,788 gold per mile; on the island of Cebu, P70,481 per kilometer, or \$56,717 United States currency per mile.

The government of the Philippine Islands had paid out in interest on the guaranteed bonds of these railway lines at the close of the fiscal year P2,917,910, and there has been refunded about P111,393, leaving a balance due the government of P2,806,516.

(b) *Operation.*—The operating account of the company follows:

	Fiscal year.		Increase (+) or decrease (—).
	1912	1913	
Operating revenues.....	P773,940.90	P662,303.28	— P111,637.62
Operating expenses.....	596,848.40	624,677.82	+ 27,892.42
Net operating revenues.....	177,092.50	37,625.46	— 139,467.04
Net revenue from outside operations.....		10,623.50	+ 10,623.50
Total net revenue.....	177,092.50	48,248.96	— 128,843.54
Taxes.....	3,751.09	3,582.30	— 168.79
Operating income.....	173,341.41	44,666.66	— 128,674.75
Other income.....	6,457.80	1,842.39	— 4,615.41
Gross income.....	179,799.21	46,509.05	— 133,290.16
Deductions from gross income:			
Interest on funded debt.....	660,405.34	676,082.22	+ 15,676.88
Additions and betterments charged to income.....	51,478.24	7,318.44	— 44,159.80
Appropriation to reserves.....	22,555.97		— 22,555.97
Total deductions.....	734,439.55	683,796.98	— 50,642.57
Net corporate deficit.....	554,640.34	637,287.93	+ 82,647.59
Percentage of operating expenses to operating revenue..	77.00	94.30	+ 17.30

The equipment on their lines was:

	1912	1913	Decrease.
Locomotives.....	15	15	.....
Parlor and first-class combination cars.....	1	1	.....
First and second-class combination cars.....	7	7	.....
Second-class cars.....	12	12	.....
Third-class cars.....	21	21	.....
Second-class and baggage combination cars.....	6	6	.....
Baggage, express, and postal cars.....	1	1	.....
Other cars in passenger service.....	2	2	.....
Freight cars.....	192	191	1
In company's service.....	7	7	.....

DAET TRAMWAY CO.

This road extends from Daet to Mercedes, a distance of 7.24 kilometers, and has submitted the following statement of revenue and expenses for the fiscal year 1913:

	Fiscal year 1913. ¹
Operating revenue.....	P27,371.26
Operating expenses.....	16,363.50
Net operating revenue.....	11,007.76
Taxes.....	684.28
Operating income.....	10,323.48

¹ No report for the fiscal year 1912.

MANILA ELECTRIC RAILROAD & LIGHT CO.

(a) *Construction.*—During the year this railroad completed the construction of its Singalong line and the line around the new port works. The Singalong line extends along Taft Avenue, Calle Herran, San Marcelino, and Sandejas to Vito Cruz. The length of lines in operation follows:

	1911	1912
In Manila and to Malabon and Pasay:		
Main line.....kilometers..	47.4	48.52
Second track and sidings.....do....	18.6	18.63
Total.....	66.0	67.15

(b) *Operation.*—There follows a comparative statement between the years 1911 and 1912 of the revenue from operation and operating expenses:

	Calendar year.		Increase (+) or decrease (—).
	1911	1912	
Operating revenue.....	P2,621,701.17	P2,846,762.22	+ P225,061.05
Operating expenses.....	1,209,390.97	1,329,266.12	+ 119,875.15
Net operating revenue.....	1,412,310.20	1,517,496.10	+ 105,185.90
Taxes.....	41,864.31	96,034.34	+ 54,170.03
Operating income:			
Including light and power.....	1,370,445.89	1,421,461.76	+ 51,015.87
Transportation only.....	638,702.16	631,162.38	— 7,539.78
Percentage of operating expenses to gross revenue (transportation only).....	48.0	59.0	+ 11.0
Total pay passengers carried.....	14,656,254	15,878,821	+ 1,222,567

Equipment owned is as follows:

	1911	1912	Increase.
Passenger cars.....	105	114	9
Freight cars.....	1	1	.....
Work cars.....	1	1	.....
Sprinkler cars.....	1	1	.....

MANILA SUBURBAN RAILWAYS CO.

The Manila Suburban Railways Co. is an extension of the Manila Electric Railroad & Light Co. No construction work was performed during the year.

(a) *Operation*—

	Calendar year.		Increase (+) or decrease (—)
	1911	1912	
Operating revenue.....	P315,414.83	P332,905.23	+ P17,490.40
Operating expenses.....	126,183.41	130,483.97	+ 4,300.56
Net operating revenue.....	189,231.42	202,421.26	+ 13,189.84
Taxes.....	9,276.75	9,298.23	+ 21.50
Operating income:			
Including light and power.....	179,954.67	193,123.01	+ 13,168.34
Transportation only.....	154,983.53	165,749.46	+ 10,765.93
Percentage of operating expenses to gross revenue (transportation only).....	41.0	39.4	— 1.6
Total pay passengers carried.....	3,995,621	4,170,234	+ 174,613

(b) Equipment owned.—

	1911	1912
Passenger cars.....	6	6
Freight cars.....	3	2
Trailer freight cars.....	4	4

COST.

The net expenses of the office of the supervising railway expert chargeable to insular funds amounted to ₱14,794.85.

OFFICE OF THE CONSULTING ARCHITECT.

W. E. PARSONS, CONSULTING ARCHITECT.

PERSONNEL.

The only important change made in this office was that of the appointment of the assistant architect, Mr. George C. Fenhagen, on September 1, 1912, to succeed Mr. Louis E. Marie, resigned.

WORK PERFORMED.

During the fiscal year 1913 the office has been working on 136 projects, representing an aggregate of cost of ₱11,187,364.67. Of the 136 projects, 61 final plans were completed during the year, 50 of which were for reinforced concrete buildings, and 11 buildings of native hard wood, the estimated cost of which is ₱1,762,479. The projects mentioned do not include special services rendered to the city of Manila, development of the port district, and plans for the development of Baguio, Cebu, Iloilo, and other cities.

COMPLETED PLANS.

Among the most important plans completed during the present year are the girls' dormitory, normal school, the estimated cost of which will be ₱300,000; the central school, Manila, the estimated cost of which will be ₱100,000; addition to the dispensary, Philippine General Hospital, at estimated cost of ₱80,000; contagious-disease ward, San Lazaro, at estimated cost of ₱60,000; standard 20-room schoolhouse, bureau of education, at estimated cost of ₱45,000; Tondo fire station, at estimated cost of ₱26,000; superintendent's residence, Philippine General Hospital, at estimated cost of ₱20,000. There have been 28 plans for market buildings in 10 provinces at a cost ranging from ₱10,000 to ₱50,000 each, and 4 plans for presidencias whose estimated construction cost is ₱25,000 each.

PENDING PLANS.

Among those projects the plans of which are in course of preparation is a continuation of work on the new capitol group, ₱6,113,605; new bureau of printing, ₱833,000; provincial building, Lingayen, ₱235,000; provincial building, Cebu, ₱200,000; provincial building, Tacloban, ₱125,000; immigration detention station, ₱114,000; the Governor General's official residence in Baguio, ₱150,000.

COMPLETED STRUCTURES.

The most noticeable and most important structure completed this year upon plans prepared by the consulting architect is University Hall, on Calle Padre Faura, Manila, which will stand as a monument to the genius of the office of the consulting architect. Others are the sales agency building, Manila; the superintendent's residence, Philippine General Hospital, Manila; Tuguegarao Presidencia, Cagayan; and 14 municipal markets. It might be added in passing that there have been built during the year on standard schoolhouse plans prepared by the office of the consulting architect 110 barrio schools, the aggregate cost of which is ₱1,001,365.

The most extensive work of the office during the year was probably the planning of municipal markets. There have been 28 complete plans furnished and 30 preliminary plans. These plans not only include special location plans showing proposed construction and future extension, but also plans for the improvement of the grounds and streets surrounding the market sites, including the planting of shade trees. The number of plans on hand now is so large and of such variety that it will be unnecessary in the future to plan new buildings, the plans on hand being standardized.

AQUARIUM, MANILA.

This building, which was expected to be ready for operation in November, 1912, is not yet open to the public. It was found that a great deal of the work done was imperfect, that the glass ordered was not of sufficient thickness to withstand the pressure of water, and that a great number of pipes leading through the aquarium were of such material that the action of the salt water would be fatal to the fish. It is hoped that the necessary changes will be made for the opening of the building to the public within a few months.

THE CAPITOL GROUP.

Although the prospects for the construction of the capitol in the near future are not very bright because of the financial condition of the country, the work on the plans has advanced steadily during the past year. It is proposed to prepare a model of all the buildings included in the group, together with the Luneta, on a scale of 1-500, and also two perspective views in water color for use in the Panama Exposition in San Francisco.

IMPROVEMENT IN THE CITY OF MANILA.

A start has been made upon the building of the new Cavite Boulevard, and during the past year it has been extended from the new fill along the bay to Calle Cortabitarte, Malate.

The harbor line of the Pasig River, north side, between the bridge of Spain and Santa Cruz, has been moved to the south, so as to allow for a muelle 12 meters in width along the river between these bridges.

Calle Dasmariñas is being opened, which will give relief to the congestion in that section of the city.

Upon the recommendation of the park committee, the municipal board is to purchase, for a park, 18,000 meters of land in Pandacan, near the quarantine station.

The building of the Batangas and Cavite branch of the Manila Railroad Co. will necessitate a rearrangement of the street system differing somewhat from the Burnham plan, since the lines pass through thickly populated sections and the number of grade crossings are multiplied. The drafting of this plan for needed changes in the Burnham plan is now in progress.

In all cases of city planning the Burnham plans have been followed where actual conditions did not require departures. The suburbs of the city of Manila are being rapidly developed, and every day it becomes more apparent that action should be taken in order that suburban improvements may conform to city lines, and should include the extension of the city streets and boulevards beyond the city limits, the reservation of spaces for parks, and provisions for extending the water supply, sewers, and lighting. The city of Manila having no jurisdiction beyond its limits, it is suggested that a committee be appointed either by law or by administration to consider the advisability or give power to accept a general plan for suburban improvements. This committee should consist of municipal, provincial, and insular officials and suburban residents.

IMPROVEMENT OF THE CITY OF ILOILO.

A plan of a street system for the lower part of the city of Iloilo has been prepared by the office of the consulting architect.

IMPROVEMENTS IN THE CITY OF BAGUIO.

The reservation of 46 hectares between the North and South Drives in Baguio for a forest park during the past year should receive notice. The office of the consulting architect, in conjunction with the bureau of forestry, has developed a planting scheme for this park. About 9,000 plants and trees have been set out during the past year, a particular study being given to native varieties known to do well in this locality.

INDEPENDENCE OF OFFICE.

It was the intention on the 1st of July to separate the office of the consulting architect entirely from the bureau of public works, giving to the consulting architect a competent structural engineer and necessary assistants, and other employees, so as to make his office a complete entity of itself. Investigation, however, disclosed the fact that legislation was necessary in order to carry out this proposition. As the Legislature was not in session, the necessary legislation could not be had at that time. There are many reasons pointed out by the consulting architect why his office should be entirely independent of the bureau of public works. I will invite your attention to these matters during the forthcoming session of the Legislature.

COST.

The cost of the office of the consulting architect for the year, including salaries, transportation, and miscellaneous expenses, was ₱102,008, or ₱9,247 in excess of that of the preceding year.

CORPORATIONS.

The division of archives, patents, copyrights, and trade-marks in the executive bureau issued 12 licenses to foreign corporations, and filed 96 articles of incorporation of domestic stock corporations, 26 articles of incorporation of domestic nonstock corporations, and 1 article of incorporation of a religious corporation.

On June 30, 1913, there were licensed and authorized to transact business in the Philippine Islands a total of 254 foreign and 623 domestic corporations. Of the domestic corporations whose articles have been filed in accordance with law, 126 are nonstock and 35 religious corporations.

Nine amended articles of incorporation, 1 change of name, 16 certificates of increase of capital stock, 5 letters of appointment, 96 by-laws, 19 amended by-laws, and 1 mortgage in accordance with Act No. 2243 were filed and recorded.

The total amount of fees collected for the filing of documents was ₱9,305, representing an increase of ₱2,856 over the amount collected in the fiscal year 1912.

Reference is again made to the necessity for the enactment of a comprehensive insurance law.

By Act No. 2243, passed by the Philippine Legislature on February 11, 1913, provision was made for the recording of mortgages or trust deeds issued by public-service corporations to secure bonds.

MANILA PORT DISTRICT.

All of the blocks in the port district, city of Manila, have now been surveyed and are open to lease. For various economic reasons there was but little activity during the year in relation to this property. One block was leased, and two have been advertised and awarded, but formal lease has not yet issued.

The marine railways and shops in the inner basin reported in our last report as under construction by private capital were completed in July, 1913, and the first vessel was docked for repairs July 9, 1913. The marine railway can accommodate any vessel now in interisland service and many of the smaller foreign vessels. The cradle has a length of 430 feet, built in two sections to take up one vessel of 400 feet length or two of smaller size independently. The new plant is a valuable addition to the equipment of the port.

PHILIPPINE EXPOSITION.

By Act No. 2224, passed by the Philippine Legislature on February 6, 1913, provision was made for holding in the city of Manila, in the year 1914, at a date to be fixed by the board of directors provided, an exposition of Philippine products, to be known as the Philippine Exposition; and by Act No. 2225, also passed on February 6, 1913, the sum of 100,000 pesos was appropriated for the expenses incident to such exposition. The board of directors provided by the act has organized and has accomplished much of the necessary preliminary work. The dates for holding the exposition have been set as January 31 to February 14, inclusive, the site for the same selected, and all indications are that this exhibit will prove of incalculable value to the commercial and agricultural progress of the islands.

IRRIGATION COUNCIL.

The irrigation council, of which the secretary of commerce and police is chairman by virtue of section 2 of Act No. 2152, met for the first time on May 17, 1912. Four meetings were held during the fiscal year 1913, at which eight applications for authority to appropriate public waters were considered. Seven of the applications were acted upon favorably, and one is still under investigation.

The undersigned has acted as secretary of commerce and police in addition to his duties as a member of the Philippine Commission without portfolio, during the entire period covered by this report.

Respectfully submitted.

FRANK A. BRANAGAN,
Acting Secretary of Commerce and Police.

To the PHILIPPINE COMMISSION.

REPORT OF THE SECRETARY OF FINANCE AND JUSTICE.

DEPARTMENT OF FINANCE AND JUSTICE,
Manila, September 19, 1913.

GENTLEMEN: I have the honor to submit the following report on matters pertaining to the department of finance and justice for the fiscal year ending June 30, 1913:

JUDICIARY.

SUPREME COURT.

The increase in the business of the supreme court noted in previous years continued during the fiscal year 1913. There were filed 500 civil and 488 criminal cases, compared with 441 and 476, respectively, during the preceding year, showing an increase of 71. There were decided 289 civil and 529 criminal cases, a total of 818, compared with 354 civil and 286 criminal, a total of 640, for the previous year. Cases otherwise disposed of amounted to 161, 73 civil and 88 criminal, compared with 75 civil and 66 criminal, a total of 141, for the previous year.

From these figures it appears that more cases were disposed of by the court in 1913 than during 1912; yet the number of cases pending at the close of the year 1913—642 civil and 371 criminal—exceeded by 9 the number pending at the beginning thereof, and corresponding exactly to the excess in the number filed over the number disposed of during the year. These figures also show that while the criminal docket shows improvement, the civil docket, owing to the greater number of civil cases filed during the year and to the less number disposed of, shows a larger number pending at the close of 1913.

Of the 1,013 cases pending at the close of the year, 86 were submitted but no decision rendered, 238 were ready for hearing and placed on the calendar for July, 1913, and 689 were not yet ready for hearing on account of briefs not being filed.

In order to facilitate the work of the supreme court a number of law clerks have been appointed to assist the justices, and the indications are that a law clerk will soon have to be provided for each justice. It is expected that these law clerks will contribute materially to the prompt dispatch of cases.

Candidates for admission to the bar to the number of 247 were examined during the year, as compared with 139 for the preceding year. Of this number 95 passed the examination, compared with 80 for the previous year.

Volumes XXI and XXII of the Philippine Reports were completed and published during the year. This brings the reports down to July 30, 1912. Volumes XXIII and XXIV were in the hands of the printer at the close of the fiscal year, the first-mentioned volume being almost completed at that time.

The total of the fines, fees, and costs collected by the court during the year was ₱13,973.49, as compared with ₱11,071.06 for the preceding year.

COURT OF FIRST INSTANCE OF MANILA.

During the year 1,080 civil cases were filed and 823 disposed of, as compared with 937 filed and 798 disposed of during the fiscal year 1912. There remained at the close of the year 1,722 civil cases, as against 1,257 pending at the beginning of the year. There were 1,589 criminal cases filed and 1,471 disposed of, as compared with 1,397 filed and 1,388 disposed of during 1912. There remained at the close of the year 186 criminal cases, as against 68 pending at the beginning of the year. There were 4 customs appeal cases pending at the beginning of the year; 18 were filed and 17 disposed of, leaving 5 pending at the close of the year.

The above figures show that the increase in the business of the court, both civil and criminal, noted during the previous year continued during the year just closed. Due to this increase of business, notwithstanding the large amount of work accomplished by the court, there were more cases, both civil and criminal, pending at the close of the year than at the beginning. The large number of civil cases pending at the end of the year is also owing in part to the fact that, by a mistake of the clerk in charge of the statistics of the court, 208 cases were included in cases decided during 1912 which should have been included in pending cases. To remedy this condition from time to time a judge at large has been assigned to duty in the court of Manila. Experience, however, has demonstrated that this is not sufficient, and that in order to remedy the situation a judge at large should be assigned to Manila for an indefinite period, but this has not been possible on account of the lack of judges. If the number of judges is increased, as I shall later on recommend, it will then be possible to assign another judge to Manila until the docket of that court is brought up to date.

The total collections for the court of first instance of Manila amounted to ₱81,752.78, compared with ₱66,630.57 for the previous year.

COURTS OF FIRST INSTANCE IN THE PROVINCES.

During the year there were filed, including probate cases, 3,890 civil cases, compared with 3,881 civil cases during the preceding year, an excess of 9 cases. There were 3,556 civil cases disposed of, compared with 3,334 during the preceding year, an increase of 222. At the close of the year there were pending 3,072 ordinary civil and 2,519 probate cases, a total of 5,591, compared with 2,825 ordinary civil and 2,432 probate cases, a total of 5,257 civil cases pending at the beginning of the year, an increase of 334 cases.

There were 8,006 criminal cases filed during the year, compared with 7,372 for the preceding year, an increase of 624. There were 7,638 criminal cases disposed of during the year, compared with 6,764 during the preceding year, an increase of 874. The number of criminal cases pending at the close of the year was 2,712, as compared with 2,344 at the beginning of the year, an increase of 368.

The above figures show that the courts of first instance in the provinces accomplished more work in both civil and criminal cases than in the preceding year, but due to the fact that the increase in the number of cases filed during the preceding year continued during the year under consideration, there were at the end of the year a greater number of pending cases, both civil and criminal. The condition, however, of the criminal docket may be considered satisfactory, notwithstanding the increase of pending cases.

In my report for last year attention was called to the delay in the dispatch of probate cases, principally owing to the lack of time on the part of the judges. While the increase in the total number of civil cases pending at the close of the year was 6.35 per cent, it will be observed that the increase in the number of probate cases pending was only 3.71 per cent, indicating that the judges had been able to give more attention to probate matters during the past year.

The attorney general, in compliance with the recommendation of the Governor General, the latter part of the last fiscal year made an inspection of the offices of the provincial fiscals in 25 provinces, namely: Cavite, Nueva Ecija, Rizal, Bulacan, La Union, Ilocos Sur, Ilocos Norte, Pangasinan, Parlac, Pampanga, Laguna, Batangas, Tayabas, Sorsogon, Albay, Ambos Camarines, Samar, Leyte, Surigao, Cebu, Bohol, Oriental Negros, Occidental Negros, Iloilo, and Capiz. At the same time, following instructions, he also investigated the causes of delay in the dispatch of civil and criminal cases in those provinces. In the report of his investigation, dated May 5, 1913, he mentions the following causes of delay in ordinary civil cases: Inactivity of the parties in presenting their suits; dilatory pleas and baseless demurrers filed by attorneys; motions for continuance; nonappearance of witnesses; the principal cause being the lack of time on the part of the judges. As to the delay in probate cases, he mentions the following causes: Ignorance, neglect, and inactivity of administrators, guardians, and commissioners; lack of activity of attorneys; ignorance and negligence of parties; complex, inadequate, and expensive procedure, particularly with reference to small estates, remote residence of administrators and heirs, and difficulty of communication; lack of time on the part of judges and clerks of court.

With respect to the dispatch of criminal cases, the attorney general says:

Generally speaking, detention prisoners are tried within the court term immediately following their admission into the provincial jail, the exceptions being those who, through their counsel, petition for the postponement of the hearing until they can secure certain necessary evidence. Rare are the instances when the provincial fiscal is compelled to ask for the postponement of cases in which the accused is detained because of the failure of some material witness of the Government to appear in time. The detention prisoners I found in the provincial jails, with the exception of a few, were admitted after the last session of court, and upon investigation I was told that their cases would be included in the calendar for the next term prior to the vacation of the court.

Up to the date of my inspection of the detention prisoners in the provincial jails awaiting trial there were 191 who had been there for less than a month, 141 for less than two months, 65 for less than three months, 16 for less than four months, 20 for less than five months, 11 for less than six months, 6 for less than seven months, 3 for less than eight months, and 2 for less than nine months.

The reasons for delay in some of these cases are, according to the attorney general, independent of the will of the judge, as, for instance, the insanity of the defendant; absence of witnesses; absence of the

prosecution's witnesses in very important cases; motions for continuance by defendants' attorneys; nonappearance of witnesses due to lack of communication.

Further on the attorney general says in his report:

It can be stated that the dispatch of criminal cases by the Courts of First Instance is kept up to date as far as circumstances permit. Generally all criminal cases submitted during a certain term of court are finished, especially those of detention prisoners, although cases are not wanting in which the respective judgments are rendered after the court sessions.

The condition of the court, as above indicated, shows the need for more judges, as was stated in my report for last year. It is to be regretted that the Commission and Assembly, both recognizing this need, were unable to agree at the last session upon legislation to remedy the situation. This was due rather to lack of time than to want of intelligence, as the bill to reorganize the courts, which originated in the Assembly, was received in the Commission about the last days of the regular session. It was then returned to the Assembly with amendments, and the Commission was only notified of the non-concurrence of the Assembly on the last day of the special session. It is to be hoped that this matter will be taken up in time at the coming session of the legislature and that the two houses will be able to come to a satisfactory agreement.

At the last session of the legislature, on December 11, 1912, the Commission passed a bill providing for the summary settlement of estates of deceased persons in certain cases. It is unfortunate that the Assembly took no action on this bill except to refer it to the committee on judiciary, in whose hands it was at the close of the session.

During the year special terms of court were authorized to be held at places other than the regular places, as follows:

Date of order.	Judge.	Where held.
July 16, 1912	Judge of the district.....	Mambajao, Misamis.
July 22, 1912	do.....	Oroquieta, Misamis.
Aug. 3, 1912	do.....	Camiling, Tarlac.
Aug. 7, 1912	do.....	Tigaon, Ambos Camarines.
Sept. 10, 1912	do.....	Ormoc, Leyte.
Oct. 23, 1912	Ysidro Paredes, judge at large.....	Aparri, Cagayan.
Nov. 26, 1912	Judge of the district.....	Butuan, Agusan.
Dec. 23, 1912	do.....	Cervantes, Quiangan, and Bontoc, Mountain.
Dec. 28, 1912	do.....	Aparri, Cagayan.
Jan. 9, 1913	do.....	Tagudin, Mountain.
Jan. 13, 1913	do.....	Tiaong and Sariaya, Tayabas.
Feb. 6, 1913	do.....	Cuyapo, Nueva Ecija.
Feb. 14, 1913	do.....	Misamis, Misamis.
Feb. 28, 1913	do.....	Basco, Batanes.
Mar. 19, 1913	do.....	Virac, Albay.
Do.....	do.....	Bulalacao and San José, Mindoro.
Apr. 17, 1913	do.....	Paracale, Daet and Tigaon, Ambos Camarines.
Apr. 23, 1913	do.....	Quiangan, Cervantes and Tagudin, Mountain.
May 6, 1913	do.....	San José, Bulalacao and Abra de Ilog, Mindoro.
		Butuan, Agusan.

In addition to the above, orders were issued directing judges at large to act in various districts, as follows:

Date of order.	Judge.	District to which assigned.
July 15, 1912	Ysidro Paredes.....	Seventh.
Aug. 9, 1912	George N. Hurd.....	Mountain.
Do.....	Ysidro Paredes.....	Fourth and First.
Sept. 4, 1912	George N. Hurd.....	Fifteenth.
Sept. 27, 1912	Higinio Benitez.....	Tenth.
Sept. 30, 1912	George N. Hurd.....	Mountain.
Oct. 11, 1912	Ysidro Paredes.....	Fourth.
Oct. 18, 1912	Herbert D. Gale.....	Seventh.
Nov. 19, 1912	George N. Hurd.....	Manila.
Nov. 23, 1912	do.....	Eleventh.
Jan. 2, 1913	Herbert D. Gale.....	Sixth.
Jan. 31, 1913	do.....	Seventh.
Feb. 27, 1913	Higinio Benitez.....	Thirteenth.
Apr. 3, 1913	Herbert D. Gale.....	Seventh.
Apr. 11, 1913	John P. Weissenhagen.....	Sixth.
Apr. 28, 1913	Higinio Benitez.....	Third.
May 31, 1913	do.....	Seventh.
Do.....	John P. Weissenhagen.....	Fifteenth.
June 18, 1913	do.....	Manila.
June 23, 1913	do.....	Thirteenth.
June 30, 1913	Higinio Benitez.....	Sixteenth.

Orders were also issued directing regular judges to act in other districts, as follows:

Date of order.	Judge.	Regular district.	District to which assigned.
July 12, 1912	Mariano Cui.....	Seventh.....	Sixteenth.
Oct. 21, 1912	Richard Campbell.....	Mountain.....	Second.
Jan. 16, 1913	do.....	Tenth.....	Mountain.
Feb. 18, 1913	do.....	do.....	Fifth.
Mar. 25, 1913	José C. Abreu.....	Sixteenth.....	Twelfth.
Apr. 2, 1913	Richard Campbell.....	Tenth.....	Third.
Apr. 4, 1913	do.....	do.....	Fifth.
Apr. 23, 1913	Charles A. Low.....	Fourteenth.....	Thirteenth.
Apr. 28, 1913	José C. Abreu.....	Sixteenth.....	Eighth.
May 8, 1913	do.....	do.....	Manila.
May 19, 1913	do.....	do.....	Eighth.
May 20, 1913	John S. Powell.....	Ninth.....	Fifteenth and Tenth.
June 7, 1913	W. E. McMahon.....	Mountain.....	Fifth.
June 21, 1913	A. S. Crossfield.....	Manila.....	Eleventh.
June 23, 1913	W. E. McMahon.....	Mountain.....	Third.
June 25, 1913	Vicente Nepomuceno.....	Thirteenth.....	Manila.

The collections made by the courts of first instance in the provinces during the fiscal year 1913, as reported by the clerks, amounted to ₱156,538.17, as compared with ₱136,332.37 in 1912.

COURT OF LAND REGISTRATION.

During the year 930 applications were filed, compared with 774 for the previous fiscal year. Of these applications 26 were filed by the insular government, 11 by provincial governments, 114 by municipal governments, and 11 by the city of Manila, a total of 162, the remainder being filed by private individuals.

The applications filed during the year represent receipts to the amount of ₱49,484.13, involving property to the value of ₱21,814,480.72, compared with ₱47,032.20 receipts and ₱14,932,600.48 value of property involved in applications for the previous year. The property value above-mentioned is only approximately accurate, the property value in certain cases not having been ascertained; but the figures if obtainable would not materially affect the total given.

The business transacted by the court during the year and the status of cases filed to June 30, 1913, is shown by the following table:

	Con- firmed.	Denied.	Dis- missed.	Total.
Final disposition.....	649	26	24	699
Decided, but subject to appeal.....	130	2	11	143
Appealed to supreme court.....	28	4	2	34
Total year's business.....	807	32	37	876
Previous appeals pending.....	55	7	3	65
Prior final disposition made.....	6,755	262	618	7,635
Total business transacted.....	7,617	301	658	8,576
Pending on the dockets.....				602
Total cases, June 30, 1913.....				9,178

Of the 9,178 cases filed from the organization of the court to June 30, 1913, 2,440 involved property in the city of Manila to the value of ₱52,494,656.35, and 6,738 applications represented property in the provinces to the value of ₱70,078,915.40, the total value of property involved being ₱122,573,571.75.

During the year 4,070 final decrees were issued in 845 cases covering 5,260 parcels of land, embracing 78,376.78 hectares. The total number of cases in which decrees have been issued by the court since its organization to June 30, 1913, is 7,202, covering 16,215 parcels of land, embracing an area of 417,547.97 hectares.

The number of parcels for which decrees were issued during the year is only 40 less than the total number for which decrees were issued from the time the court was instituted in 1903 to June 30, 1910. This result may be attributed directly to cadastral proceedings.

The total number of cases in which decrees were issued does not agree with the number of cases finally disposed of, as shown by the foregoing table. This is due to the fact that corrections in plans and surveys are frequently ordered in the final decision, and for that reason many cases are decided in which decrees are not issued, and to the further fact that decrees may be issued in one year in cases which were finally disposed of in the preceding year.

COST OF MAINTAINING THE JUDICIARY AND CODE COMMITTEE.

The following figures show the cost of maintaining the judiciary (including justice of the peace courts) and the code committee for the past fiscal year:

	Judiciary.	Code committee.
Total expense.....	₱1,520,313.12	₱77,813.36
Income.....	626,587.14	.....
Net expenditures.....	893,725.98	77,813.36

This table shows a substantial decrease in the net expenditures for the judiciary, as compared with the fiscal year 1912, during which the net expenditures for the judiciary, including the justice of the

peace courts, amounted to ₱973,976.25. The net expenditures for the code committee for the fiscal year under consideration show an increase of ₱4,671.15. The reduction in the net expenditures for the judiciary is entirely due to the heavy increase in the income from justice of the peace courts from fines, fees, etc., which amounted to ₱384,139.05, as compared with ₱263,258.55 for the previous fiscal year, resulting in a reduction of the net expenditures for the justice of the peace courts from ₱222,656.12 for the fiscal year 1912 to ₱117,640.30 for the fiscal year just closed.

JUSTICE OF THE PEACE COURTS.

During the year 159 justices of the peace and 161 auxiliary justices of the peace were appointed, 6 and 9, respectively, declined appointment; 24 and 59 resigned; 48 and 9 were relieved from office, not having qualified under Act No. 2041; 4 and 3 died. Charges were brought against 16 justices of the peace and 7 auxiliary justices of the peace, of whom 10 and 4, respectively, were suspended pending final decision; 7 and 2 were removed and disqualified; 2 justices of the peace were removed; 3 justices and 5 auxiliary justices of the peace were required to resign or resignation accepted. One justice was reinstated with reprimand, and 3 justices of the peace were found not guilty.

At the end of the fiscal year there were 619 justices of the peace and 85 auxiliary justices of the peace having the qualifications required by Act No. 2041. Fifty-one justices and 401 auxiliary justices of the peace were holding temporarily the positions without being qualified under said act.

These figures show in the first place that there were more justices of the peace with the necessary qualifications at the end of the fiscal year 1913 than there were at the end of the previous fiscal year, namely, 619, as compared with 513. On the other hand, there are more auxiliary justices of the peace not qualified, 401, as compared with 354. This is due to the fact that a great many auxiliary justices of the peace having the proper qualifications were promoted to the office of justice of the peace. In the second place, the number of resignations of justices of the peace was reduced 75 per cent, and those of auxiliary justices of the peace 54 per cent, as compared with the previous fiscal year. Thirdly, removals from the office of justice and auxiliary justice of the peace during the fiscal year under consideration show a reduction of 55 per cent, as compared with the previous fiscal year. This means improvement in the qualifications of the incumbents, more permanency in office, and more satisfactory service. This data is only a confirmation of what the attorney general says of the justice of the peace courts in his annual report:

The operation of said courts since the placing of justices of the peace on a salary basis still continues to be far more satisfactory than the previous arrangement. The additional expense to the government is slight compared with the greatly increased efficiency secured in the operation of the courts under the new system.

The attorney general, in his report dated May 5, 1913, of the result of his inspection trip, makes the following remark:

It is gratifying to observe that the high expectation anticipated from the reorganization of the justices of the peace has in the majority of cases been realized. It is the unanimous opinion of the provincial fiscals, judges of the courts of first instance, and

of the senior inspectors in the provinces that the justices of the peace appointed under the provisions of Act 2041, with but very rare exceptions, render efficient and satisfactory service and demonstrate sound and just discretion in the decision of cases submitted to them. And it is the opinion of some judges and senior inspectors that this branch of the public service can still further be improved if the justice of the peace appointed for one municipality is a resident of another municipality, because in such a case the justice of the peace will be free from any local influence.

There is no question that it would be one step further in the betterment of the service to have justices of the peace who are not residents of the same municipality, but it is very difficult to carry out such a policy for the reason that the salary given to justices of the peace is not sufficient inducement for a man to accept a position as justice of the peace outside of his own municipality. Wherever possible this policy has been pursued, and in making appointments, other qualifications being equal, preference is given to the persons not residing within the municipality where the vacancy exists.

BUREAU OF JUSTICE.

The legal work performed by the bureau of justice for the fiscal year 1913, as compared with the preceding fiscal year, is shown in condensed form in the following summary:

	1912	1913
Cases in the supreme court in which this office presented briefs and arguments: Civil, 78; criminal, 561.....	266	639
Cases in the supreme court in which this office appeared by motion, etc.....	29	75
Cases in the court of land registration examined by this office, but no opposition presented.....	604	489
Cases in the court of land registration in which this office appeared and opposed registration.....	536	445
Cases conducted in the courts of first instance.....	118	192
Cases conducted in the justice of the peace court of Manila.....		1,463
Written opinions rendered by the attorney general to the chief executive, heads of the four departments, chiefs of bureaus, and other officials.....	225	200
Applications for loans submitted by Agricultural Bank for examination of title papers.....	170	369
Mortgages certified after examination of titles.....	69	148

The attorney general took charge of and administered the estates of 14 deceased American employees and instituted proceedings for the appointment of an administrator in 3 estates. There was collected on account of estates administered ₱12,817.34, leaving a balance on hand on June 30 of ₱5,182.49 to the credit of 12 estates pending settlement.

The total expense of the bureau during the year amounted to ₱148,289, as compared with ₱143,245 for the previous fiscal year.

PROVINCIAL FISCALS.

The attorney general in the above-mentioned report of May 5, 1913, makes the following remarks as the result of his inspection of the offices of the provincial fiscals:

The offices of the fiscals of the provinces above named are found in good condition, differing only with respect to the orderly manner in which they are kept and their tidy appearance, for while some are excellently equipped others are modestly installed, due to the reduced room available and the scanty furniture with which they are provided. The offices of the provincial fiscals of Laguna, Tayabas, Nueva Ecija,

Albay, Ambos Camarines, Iloilo, and Capiz deserve special mention for the orderly manner in which they are kept and their tidy appearance.

Administrative matters are generally disposed of within the week of their receipt in the office of the fiscal, although there are some fiscals, as, for instance, those of Nueva Ecija, Laguna, Tayabas, and Batangas, who sometimes are unable to attend during the court term to the inquiries coming from the respective municipalities which require investigation and study. As to judicial matters, upon the receipt of the records of the preliminary investigations from the clerk of court, the fiscal generally disposes of the cases within the week in which they are received, especially if the accused are not out on bond. There are, however, some cases in which, owing to the accumulation of business or because the fiscals have been absent from their offices on leave, no action has been taken until after 30 days. And it even happens sometimes that such time is allowed to pass before the dismissal of the case is asked for or the complaint is filed. It is hardly necessary to say that the registration of title is also delayed sometimes and in some provinces on account of the lack of sufficient personnel to take care of the matter.

The attorney general in said report also states that, with but few exceptions, the record books of the offices, namely: The "Diary," the book called "Term Docket," one for "Register of Cases," and one for "Cases Examined, but not Registered," have been kept up to date by the provincial fiscals. The most of those who were behind in keeping these books give as a reason therefor the lack of time. The attorney general was of the opinion that the keeping of the diary was necessary, but directed the discontinuance of the other books and the keeping of a small book, "Register of accused, bondsmen, and witnesses." The attorney general also calls attention to the lack of uniformity in the manner of keeping the records of the fiscal's office, this defect to be remedied by including in the manual of the bureau of justice, now in the hands of the printer, complete rules as to the manner of keeping the records by means of the card system. In the meantime instructions have been issued for provincial fiscals to keep a small book in which will be noted in the proper column the date of receipt, nature of the inquiry or communication, the name of the writer, and the date of the action taken thereon.

In my report for last year I called attention to the fact that the former secretaries of finance and justice in their reports commended the work of the provincial fiscals, considering it on the whole very satisfactory, and I ratified the remarks of my predecessors and added that provincial fiscals had become more familiar with American criminal procedure and that their work was becoming more and more efficient. I now renew the foregoing statements, which are confirmed by the results of the investigation made by the attorney general of the offices of the provincial fiscals. Taken as a whole their work is efficient and satisfactory, as is shown by the promptness with which they dispatch all administrative and criminal matters. The fact that the work of some of the fiscals is behindhand is owing to the lack of time on their part to keep the work up to date. This may be remedied by providing them with the necessary subordinates. Some of them will need the assistance of a deputy fiscal. All this can be arranged administratively and the only obstacle encountered will be perhaps the fact that in many cases the financial condition of the provinces will not permit such additional expense.

BUREAU OF THE TREASURY.

FINANCIAL STATEMENT.

The following statement shows the balances on hand at the close of the fiscal year 1912, the receipts, withdrawals, and currency exchanges during the fiscal year under consideration, and the balances on hand at the close of business on June 30, 1913:

General funds:

Balance on hand at close of business June 30, 1912.....	₱28,414,214.48	
Receipts for fiscal year, account of—		
Customs.....	₱6,642,765.23	
Internal revenue.....	13,685,777.82	
Miscellaneous.....	1,629,181.27	
City of Manila.....	3,798,741.17	
Repayments.....	18,529,605.55	
Gold-standard fund.....	1,640,750.85	
Trust funds.....	16,463,169.67	
Currency exchanges.....	55,313,173.20	
		<u>117,703,164.76</u>
Total.....		146,117,379.24
Withdrawals for fiscal year, account of—		
Check-vouchers paid.....	67,020,333.16	
Currency exchanges.....	55,313,173.20	
		<u>122,333,506.36</u>
Balance on hand June 30, 1913.....		23,783,872.88

Depository accounts:

Balance on hand at close of business June 30, 1912.....	11,261,176.55
Deposits during fiscal year.....	110,941,893.37
	<u>122,203,069.92</u>
Withdrawals during fiscal year.....	114,568,686.40

Balance on hand June 30, 1913..... 7,634,383.52

Certificate redemption fund:

Balance on hand at close of business June 30, 1912.....	28,826,331.00
Certificates issued during fiscal year.....	₱9,790,000.00
Certificates retired during fiscal year.....	<u>7,047,900.00</u>

Net amount issued during fiscal year..... 2,742,100.00

Balance in fund at close of business June 30, 1913..... 31,568,431.00

Total of funds for which insular treasurer was accountable at close of business on June 30, 1913..... 62,986,687.40

INTEREST COLLECTED.

There was received during the year the sum of ₱770,485.19 as interest on government funds with authorized depositaries, as compared with ₱918,069.25 for the preceding fiscal year. This decrease is due to the fact that a large portion of the gold standard and other trust funds formerly deposited at interest is now invested in loans and in other more profitable ways, the interest on which more than offsets the above-mentioned decrease.

FIDELITY BOND PREMIUM FUND.

This fund, created by Act No. 1739 to provide assurance against losses, shortages, and defalcations by officers or employees accountable for public funds and public property, originated with a capital of ₱122,553.14, and on June 30, 1913, had increased to ₱509,063.04, after deducting all losses paid. Based on the total amount of bonds in effect, and on the lowest annual rate charged by the official surety companies prior to the inauguration of the fund, from January 1, 1908, the government would have paid said surety companies during the past five and one-half years approximately ₱435,000, while the total losses certified and paid from the fund during the same period amount to only ₱81,808.26, and the cost of operation, which has so far been paid out of the appropriation for the treasury bureau, does not reach ₱33,000. These figures clearly demonstrate the economy of the present system and the gain to the government by its adoption.

On January 1, 1912, the rate of premium charged was reduced from 1 per cent to three-fourths of 1 per cent, and on July 1, 1913, the rate was further reduced to one-half of 1 per cent.

The total amount of bonds in effect on June 30, 1913, was ₱8,844,450. There is no reason why this fund should not bear its own expenses, and I therefore renew the recommendation made in my last annual report that the necessary legislation be enacted for that purpose.

BANKS AND BANKING.

Agricultural Bank.—The Agricultural Bank was opened for business on October 1, 1908, and from that time until the end of the fiscal year 1913 it has made 390 loans, amounting to ₱1,760,253, or an average of ₱4,513.46 per loan. Of these 390 loans, 122 are for amounts of not more than ₱1,000, 155 for amounts between ₱1,000 and ₱5,000, 56 for amounts between ₱5,000 and ₱10,000, 39 for amounts between ₱10,000 and ₱20,000, and 18 for amounts between ₱20,000 and ₱35,000. Of the properties mortgaged 259 have Torrens titles and 131 royal or possessory titles of the Spanish Government.

The increase of the business of the bank during the year under consideration was very noticeable. Loans amounting to ₱1,028,650 were made, this amount being not only ₱807,347 in excess of the previous year, but it was also in excess of the total loans made during all the previous years by ₱297,047. The loans entirely repaid and partial payments of principal amount to ₱137,603. The loans outstanding at the close of the year were ₱1,622,650.

The borrowers with very few exceptions are prompt in paying interest. The amount of interest overdue at the end of the year was ₱5,317.95, as compared with ₱5,698.76 at the end of the preceding year.

One foreclosure proceeding was instituted, making a total of five foreclosures to date. In all the foreclosures the security has been sufficient to protect the bank against loss, except in one case where a loss of less than ₱150 will perhaps be incurred.

During the year the ₱1,000,000 appropriated for the capital of the bank became exhausted. Instead of making an appropriation

to increase the bank's capital—a proceeding which the financial condition of the treasury would not well permit—the bank was designated an official depository for provincial treasurers, and the current and checking accounts of provincial treasurers, amounting in all to ₱2,338,321.59 at the end of the fiscal year, were taken over by the bank. In this way it was possible for the bank to have at the end of the fiscal year outstanding loans to the amount of ₱1,622,650, while its capital and surplus combined amounted to only ₱1,211,313.68, showing that a portion of its deposits were used in making agricultural loans. It is not considered sound business policy to permit a mortgage bank to accept current deposits and invest them in loans, but the action of the board of directors in deciding that provincial deposits may be used to an amount not exceeding 20 per cent of the minimum reached by such deposits during the past six years, is believed to be entirely justified and the practice considered absolutely safe. This was the only practical solution of the difficulty encountered by reason of the lack of capital to meet the demands for loans. From the average of such deposits for the preceding six years it is clearly seen that they may be invested in loans, with the customary reserve requirements, without any fear of the bank having difficulty in meeting unexpected withdrawals. Provincial deposits differ from those received from the public in that they are not withdrawn capriciously by the depositors, but only when official obligations require it, and are not affected by panics and other conditions which affect ordinary deposits.

There are 24 agencies now in active operation in provinces having no banking facilities, 13 having been established during the last fiscal year. The agencies are now accepting current accounts and time deposits, paying on the latter interest at 3 per cent when the time is for six months and $3\frac{1}{2}$ per cent when the deposit is made for one year. The total of the current account balances on June 30, 1913, was ₱191,009.66, and of the time deposits ₱33,887.80. Funds received on the current account remain at the respective agencies, while funds received on time deposits are transferred to the head office. They are not used in loan operations, but are placed with commercial banks at the same rate of interest as is paid depositors by the provincial agencies. These figures indicate that the agencies at present do not do a large volume of business, but their establishment has been enthusiastically welcomed by the public, especially by the smaller merchants throughout the provinces, by reason of the facilities the agencies afford for the remittance of money from one province to another by means of personal checks certified by the local agencies, which checks are accepted at par in any province of the Islands.

The operation of these agencies will be a source of expense rather than of profit for some time, but this expense is more than justified by the service these agencies render to the people and by the hope that as the people of the provinces come to have more confidence in the agencies and acquire the habit of depositing their money in these agencies instead of keeping it idle in their coffers, the bank will not only be reimbursed for its expenses but will at the same time through its increased resources be enabled to further extend its activities by devoting, subject to the customary reserve requirements, a part of its time deposits to mortgage loans, and a part of the current account

deposits to making short-time loans on the security of agricultural products harvested, stored, and insured.

The profit and loss account on June 30, 1913, showed the net profits to be ₱95,410.45, as compared with ₱52,950.87 for the previous fiscal year, making the total surplus of net profits at the close of the fiscal year 1913 ₱211,313.68. The expenses for the fiscal year 1913 were ₱11,456, as against ₱6,619.69 for the fiscal year 1912. The increased expenses are fully explained by the bank's increased business during the fiscal year under consideration.

Private banks.—From the comparative consolidated statement of the resources and liabilities of all the commercial banks in the islands at the close of business on June 30 of the fiscal years 1912 and 1913, submitted by the insular treasurer, the following data is taken:

	1912	1913	Increase.	Decrease.
Total resources.....	₱71,771,455.70	₱67,403,192.95		₱4,368,262.75
Loans and discounts.....	11,262,039.79	11,653,880.07	₱391,840.28	
Overdrafts.....	23,922,392.39	24,503,305.11	580,912.72	
Current accounts.....	18,704,471.37	15,025,675.38		3,678,795.99
Fixed deposits.....	10,127,132.50	12,015,607.66	1,888,475.16	

American Bank in liquidation.—The insolvency of this bank necessitated the liquidation of its affairs by the insular treasurer. In my report of last year it was stated that the receivership of the bank would be shortly terminated. This occurred on August 22, 1912, on which date the receiver was discharged by the court.

GUARANTY OF INTEREST ON BOND ISSUES.

Under authority of an act of Congress approved February 6, 1905, the insular government guarantees 4 per cent interest for a period not to exceed 30 years on the first-lien bonds issued by the Philippine Railway Co. for the construction of certain lines in the islands of Panay and Cebu, and on the first-lien bonds issued by the Manila Railroad Co. for the construction of what is known as the southern lines. During the year under consideration bonds to the par value of \$161,000 were issued by the former company, and to the par value of \$1,375,000 by the latter company. The total issue of both companies amounted to \$14,854,000, and the annual liability of the insular government under its guaranty amounted to \$594,160.

BOND ISSUES.

The total bonded indebtedness of the insular government and the municipal governments of the Philippine Islands at the close of the fiscal year 1913 was as follows: Friar-lands bonds, ₱14,000,000; public works and permanent improvements bonds, ₱10,000,000; total insular government indebtedness, ₱24,000,000; city of Manila sewer and waterworks construction bonds, ₱8,000,000; city of Cebu bonds, ₱250,000; grand total, ₱32,250,000.

GOLD-STANDARD FUND.

This fund was created for the purpose of maintaining the parity of the silver peso with the gold peso. Act No. 2083, passed December

8, 1911, fixed the reserve to be maintained in a sum equivalent to 35 per cent of the money of the government of the Philippine Islands in circulation or available for that purpose. At the end of the fiscal year under consideration the money in circulation or available therefor amounted to ₱52,483,877.77, requiring a reserve fund of ₱18,369,357.22. According to the above-mentioned act, of the surplus which accumulated during the fiscal year 1913, ₱889,538.04 was transferred to the general fund, making the total amount of surplus thus transferred since the passage of said act ₱4,286,565.69. The act also authorized the loan of 50 per cent of the gold-standard fund, under certain conditions, to provinces and municipalities for public works and public improvements, and to the Manila Railroad Co. to complete certain sections of its lines. Under these conditions ₱3,714,279 of the fund has been loaned to provinces and municipalities, and ₱2,000,000 to the Manila Railroad Co.

The amount of exchange on New York sold through the fund during the year was ₱21,325,718.76, as compared with ₱24,403,118.08 for the preceding fiscal year, and exchange to the amount of ₱200,000 was sold in the United States on Manila through the fund.

The demand drafts and telegraphic transfers sold to the fund during the year by the insular treasurer on provincial treasurers, and vice versa, amounted only to ₱2,673,787.43, as against ₱3,086,128.70 for the previous fiscal year. This decrease is due to the fact that personal checks of depositors drawn on the Agricultural Bank agencies recently established in the leading Provinces and duly certified are cashed without discount throughout the islands.

The net income from all sources was ₱986,954.49, as compared with ₱1,048,772.36 for the preceding year. This decrease is due to the fact that during nearly all the first half of the year 1912 the gold-standard fund was maintained intact, and only in December, 1911, was a part of it transferred to the general fund by authority of Act No. 2083, while during the fiscal year 1913 this fund was reduced by the amount above mentioned.

CIRCULATION.

From July 1, 1903, to June 30, 1913, the total exports of Spanish-Filipino and Mexican coins, both by the government and commercially, amounted to Pfs. 33,683,558.30, which, with a small estimated balance still remaining in the islands at present, makes the amount of approximately Pfs. 34,000,000 Mexican and Spanish-Filipino currency in the islands at the time of the change of the currency system.

During the fiscal year ₱326,531.80 of the Filipino silver currency of the first issue was withdrawn from circulation and sent to the San Francisco Mint for recoinage, making a total of about 92 per cent of that coinage which has been withdrawn to date. It will take a number of years to eliminate the remaining 8 per cent, a considerable amount of which has undoubtedly been exported to China for the profit resulting therefrom, and it is safe to assume that not more than ₱2,000,000 of the amount outstanding is in actual circulation in the islands at this time. Commercial banks in the islands are cooperating with the treasury in the withdrawal of these coins by changing them at the treasury for coins of the new issue when paid into the banks.

The total silver coinage of the present authorized weight and fineness received from the United States mint amounts to ₱50,067,434.57. Silver certificates to the amount of ₱31,568,431 were in circulation, and ₱14,135,000 were in the treasury vaults on December 31, 1912.

The total amount of bank notes issued by the insular treasury to the Bank of the Philippine Islands for circulation amounted to ₱5,307,492.50.

The total amount of circulation of the islands on June 30, 1913, was ₱52,034,388.72, as compared with ₱52,055,892.97 at the close of the previous fiscal year. Based on the census of 1903, which gave the population of the islands at 7,635,426, the per capita circulation of the islands at the close of the fiscal year was ₱6.82.

EXPENSE OF CONDUCTING THE BUREAU.

The total expenditures of the bureau for the fiscal year amounted to ₱115,471.86, as compared with ₱114,834.57 for the year 1912.

BUREAU OF CUSTOMS.

GENERAL TRADE CONDITIONS.

The total value of the foreign commerce for the fiscal year 1913, amounting to \$110,010,859, as compared with \$104,869,816 for the previous fiscal year, shows continued development in the commercial activities of the islands. Imports amounted to \$56,327,533, as compared with \$54,549,980 for the previous year, and this notwithstanding the reduction in rice imports from \$10,569,949 in 1912 to \$7,940,857 in 1913. Disregarding this particular decrease, the gain in imports would be \$4,406,645. The total exports reached the sum of \$53,683,326, as against \$50,319,836 for the previous fiscal year. Shipments of copra fell off, and a lower price was received for sugar than during the previous year, but these two factors, which otherwise would have decreased the total exportations, were more than offset by the greatly increased average price of hemp exported. Compared with the average figures for the earlier years of American occupation, the total value of foreign trade for the past year appears to have doubled. The total trade between the islands and the United States—which includes, wherever mentioned in this report, Hawaii and Porto Rico—amounting to \$45,617,517, showing an increase of \$3,206,398 over that of the year 1912, is an evidence that the increased trade between the two countries noted in last year's report has not ceased.

Forty-one per cent of the total commerce of the islands in the past year was with the United States, as compared with 40 per cent for the previous year.

IMPORTS.

The increase in the value of imports in the past fiscal year is the result of increases in all classes of merchandise, with the principal exceptions of rice, live cattle, and meat and dairy products. Due to the reduction in the importation of rice, cotton goods which, with the exception of the fiscal year 1912 has long headed the list of im-

ported goods, this year occupies its accustomed place with a value of \$11,483,638, as compared with \$9,246,595 for the previous year, rice having been relegated to second place. The increase in the importation of cotton goods has been more than absorbed by the United States, since the importations of this article from said country have increased from \$4,143,067 in 1912 to \$6,827,082 during the year 1913. On the other hand importations of this article from other countries have diminished, Japan having been the greatest proportional sufferer in this respect. Notwithstanding the falling off in rice, the importations of that commodity were greater for the past year than for any other year since the American occupation, with the exception of 1903, 1904, and 1912, in which years the imports of rice exceeded ₱10,000,000.

Manufactures of iron and steel occupy third place among imported articles, an increase in the importation of these articles being noted for some years past. From \$2,164,907 in 1908 the importation of these articles has increased to \$6,608,914 in 1913. The principal item in this group is machinery, the value of which is 40 per cent of the total, and the increase for the year was practically 80 per cent of the total group. Sugar machinery increased in value \$173,000, more than half of which was in importations from the United States, and about 40 per cent from the United Kingdom.

The United States continues to occupy first place among the countries sending merchandise to these islands, with importations of \$25,646,875, as compared with \$20,770,536 in 1912, showing an increase of \$4,876,339, which exceeds by \$469,694 the gain in the total importations which, disregarding the decreased importation of rice, amounted during the year to \$4,406,645. As in previous years, next come the French Indies, notwithstanding the fact that, due to the decreased receipts of rice, importations from that country fell off from \$9,575,741 to \$6,740,234. The United Kingdom takes third place, with imports to the value of \$5,652,880, as compared with \$5,509,773 for 1912. Australasia occupies fourth place, with imports amounting to \$2,816,573, forcing Japan to fifth place, with imports amounting to \$2,756,508. Then comes, as in previous years, Germany, China, British East Indies, France, Spain, and Hongkong in the order named.

EXPORTS.

The total value of exports rose during the year from \$50,319,836 to \$53,683,326. The latter amount includes, however, exports of foreign merchandise, and a strict comparison with the previous year's business requires a deduction from this total of \$376,072 for reexports, leaving a net increase in the export business for the year of \$2,987,418. The increase in exports is largely due to the increase in the value of the hemp exported.

Hemp again occupies first place among exported articles, from which place it was forced last year by copra. The total value of hemp exported amounted to \$23,044,744—greater than any year since the American occupation—as compared with \$16,283,510 in 1912. This increase in value is not due, however, to increased quantity, but to the higher average price obtained for the product. The total amount of hemp shipped was actually less than any year since 1908, but the average value per ton was more than 50 per cent

higher than at any other time during the past five years. This increased average value per ton was not the result alone of the higher price received, but was also the result of the better quality of hemp exported. The diminished exportation of this article to the United States noted in the years 1911 and 1912 has continued as regards quantity, but not with respect to value, there having been exported to that country 63,715 metric tons, as compared with 69,574 metric tons in 1912. The value reached \$11,613,943, at an average value per ton of \$182.20, as compared with \$7,751,489, at an average value per ton of \$111.41, for the previous fiscal year. This was the highest value per ton for any year under American administration, except 1907, when the average value per ton reached \$193.99.

The notable increase in the exportation of copra which took place during the fiscal year 1912 has not continued during the year under consideration. This was due, however, rather to the short supply than to lack of demand. There was a decrease of about 33 per cent in the volume of shipments, making the quantity exported slightly less than in the years 1910 and 1911; but the average price was higher than in any previous year, being more than double that obtained during the first six years of American occupation, with the result that, although the total value for 1913 reached only \$11,647,898, being \$4,866,851 less than in 1912, it exceeded the respective total values for 1910 and 1911, notwithstanding the larger exportations during those years. Exportations of this article to the United States, which in the years 1911 and 1912 had made such a notable increase, suffered a considerable reduction in 1913, in which year the amount being 7,460 metric tons, valued at \$720,245, compared with 24,160 metric tons, valued at \$2,339,144 for the year 1912.

Shipments of sugar were larger during the year 1913 than ever before. The price, however, paid for this product was such that with increased exportations of approximately 15 per cent, the decrease in value was about 9 per cent, as compared with the previous year. The United States, which in recent years had become the principal market for Philippine sugar, purchasing in 1912 more than 85 per cent of the total product, considerably reduced its demand during the past year, shipments to that country being less than 40 per cent of the total, the remainder being distributed to Hongkong, Japan, and China. The total exports during the year were 212,540 metric tons, valued at \$9,491,540, at an average value per ton of \$44.66, as compared with 186,016 metric tons, valued at \$10,400,575, at an average value per ton of \$55.91, for the previous year. Exports to the United States reached 83,951 metric tons, valued at \$3,989,665, at an average value per ton of \$47.52, as compared with 161,783 metric tons, valued at \$9,142,833, at an average value per ton of \$56.51, for the previous year.

The exportation of cigars, which in the year 1910 made such a remarkable increase, followed by a reaction during the succeeding two years, has again assumed large proportions, the figures for the year just closed exceeding those of 1910. The total exports were 207,396,000, valued at \$3,356,748, at an average value per thousand of \$16.18, as compared with 175,320,000, valued at \$2,660,061, at an average value per thousand of \$15.17, for the previous year. Of the thirty-two million increase thirty million is due to increased ship-

ments to the United States, practically half of the total of last year's shipments having gone to that country. It is to be noted that while the average value per thousand of all cigars exported was \$16.18, the average price obtained in the United States was \$21.76.

Cigarettes have also shown a very large comparative increase. The total exports reached 52,040,000, valued at \$57,582, at an average value per thousand of \$1.10, as compared with 34,955,000, valued at \$32,488, at an average value per thousand of \$0.93. Shipments to the United States reached 14,629,000, valued at \$31,838, at an average value per thousand of \$2.18, as compared with 5,064,000, valued at \$10,613, at an average value per thousand of \$2.09, for the previous year.

There was an increase with respect to both quantity and value in the export of leaf and smoking tobacco and other tobacco products. The amount of such tobacco exported during the year was 13,309 metric tons, valued at \$2,039,726, at an average value per ton of \$153.26, as compared with 12,548 metric tons, valued at \$1,902,644, at an average value per ton of \$151.63, for the previous year. Shipments to the United States amounted to 41 metric tons, valued at \$13,831, at an average value per ton of \$337.34, representing more than eight times the exports for the previous year.

Exports other than those already mentioned were valued at \$3,669,016, of which amount \$1,294,761 represents the trade with the United States. Among these miscellaneous items of export the largest is maguey, the exportation of which was double that of the previous year, amounting to 8,335,823 kilos, valued at \$704,394, more than half of which went to the United Kingdom. Next in importance comes knotted hemp with 406,326 kilos, valued at \$610,522, as compared with 465,818 kilos, valued at \$615,769.

Shipments of native hats during the past year were reduced to one-half the number for 1912, but the total value was \$460,126, showing a reduction of only 8 per cent. A demand has been recently noted for hats manufactured from hemp fiber, but the value of this article exported was only \$1,409, due probably to the competition of similar products manufactured in Japan at a much lower cost, enabling them to be sold in the United States, duty paid, at less than the Philippine native hats.

Other miscellaneous exportations worthy of mention are: Coconut oil, valued at \$312,513 (for several years past exports of this product have been practically nil); shells \$338,391, for 1912 \$286,818; lumber and timber \$224,479, for 1912 \$71,794; native cloth and embroidery \$203,345, for 1912 \$182,418; ilang-ilang oil \$58,309, for 1912 \$80,879.

There is still considerable latitude for the development of the sugar and tobacco industries in the islands before the limitations placed upon the importation of these products into the United States are reached. If Philippine cigars continue to show the progress made during the past two years, this trade will soon find itself hampered by the present restrictions, as the amount now exported represents more than two-thirds of the limitation.

The United States continues at the head of countries receiving goods from the Philippine Islands, notwithstanding the total amount exported to that country fell off from \$21,619,686 in the fiscal year 1912, to \$19,970,642 in 1913. With exportations to the United Kingdom of \$9,101,331, as compared with \$7,481,587 for 1912, that

country recovers second place, forcing France to third, with exportations to the latter country falling off from \$10,071,013 for 1912 to \$7,626,270 for 1913. From seventh place in 1912, Japan jumped to fourth place in 1913, the exports to that country increasing remarkably from \$1,189,826 to \$3,827,109. Hongkong also made remarkable progress during the year, exportations having increased from \$994,649 in 1912 to \$3,034,033 in 1913, and that colony now occupies fifth place instead of ninth. Then follow in order Spain, China, Germany, and the British East Indies.

CUSTOMS COLLECTIONS AND EXPENDITURES.

The gross collections of the bureau during 1913 were \$8,246,025, as compared with \$9,347,647.79 for the previous fiscal year. The decrease is centered in imports, which show a loss of \$1,078,495.33, due largely to the decrease in the imports of rice. Although the record of exports for the year shows an increase in value, this being the effect of the high price obtained for hemp, there was an actual decrease in the volume of domestic products exported, resulting in a reduction of \$82,020.32 in export duties and wharfage. There was also a slight decrease in immigration dues. Collections from licenses, storage, and other sources show some increase.

The above figures represent all the receipts of the bureau, including the amount accruing to the Moro province, the duties collected on Philippine products in the United States and credited to the insular treasury, the amount accruing to the credit of the appropriation of the bureau, collections on account of salaries of bonded warehouse keepers and extra services of employees, and collections subject to refund.

Of the above gross collections \$209,000.40 were collected at the ports of Zamboanga and Jolo, and accrued to the government of the Moro province, as compared with \$230,733.39 for the previous year. The net amount accruing to the insular government from customs collections available for appropriations was \$7,774,944.73, a reduction of \$1,133,178.91 from the net revenue for the fiscal year 1912.

The total amount credited to the appropriation of the bureau was \$100,148.53, as compared with \$90,721.83 for the previous year. The total cost of operating the bureau was \$478,978.06, as compared with \$451,156.15 for 1912. Of the above amount \$462,346.23 was borne by the insular government and \$16,631.82 by the Moro province. These figures compared with those for 1912 show an increase for the insular government and a saving in expense to the Moro province.

FOREIGN CARRYING TRADE.

During the fiscal year 1913 there entered the Philippine Islands from foreign ports 794 vessels, with a total tonnage of 1,831,212 tons, and there were cleared for foreign ports 781 vessels, representing a total tonnage of 1,868,811 tons. Compared with the fiscal year 1912, this is a decrease in total entrances and clearances of 277 vessels, and of 204,749 tons. If to the above are added the coastwise entrances and clearances which some of these vessels made at ports in the Philippine Islands other than their principal port of destination, the total is 2,456 vessels, representing 5,073,533 tons for the fiscal year

1913, compared with 2,575 vessels of 5,059,317 tons for the fiscal year 1912.

Based on the above figures it appears that 47.8 per cent of the tonnage in the foreign trade of the islands is under the British flag. American vessels represent 9.6 per cent of the total tonnage, showing an increase over the previous year; Philippine vessels 3.5 per cent, showing a decrease as compared with the previous year. Also in the value of imported and exported merchandise carried the British flag, as in previous years, dominates, the value of the cargo carried under that flag being 63.7 per cent of the total. Next come German vessels with a percentage of 10.3, followed by American vessels with a percentage of 7.1, showing a slight increase over the previous year; Japanese vessels with 6.9 per cent, and Spanish vessels with 6.6 per cent.

COASTWISE SHIPPING.

The increased activity in coastwise shipping continued through the year, and the indications are that there will be no retrogression in the immediate future. The total number of steam vessels engaged in coastwise traffic increased from 168 in 1912 to 191 in the fiscal year just closed, while the total tonnage shows a decrease from 29,291 net tons to 28,195 net tons. This decrease is more than offset by the gain in other coastwise vessels, amounting in number to 489 for the fiscal year 1913, with 26,201 net tons, as compared with 409 in number, with 21,113 net tons for the fiscal year 1912. There is a very remarkable increase in the number and tonnage of vessels licensed for lighterage and harbor work, the number being 2,167, with a total tonnage of 35,708, as compared with 558, with a total tonnage of 24,906, for the year 1912.

The shipping of seamen through the official shipping agent continues with gratifying results. The work has been performed with considerably less friction than formerly obtained, and greater permanency of service appears to have developed. There were in all 3,583 persons placed on board vessels during the year through this office, compared with 4,660 for the previous year. This decrease in seamen shipped is the direct result of the fact that during the year fewer persons were discharged than during the previous year, to wit, 2,080, as against 3,442 in 1912.

IMMIGRATION AND EMIGRATION.

The immigration work of the bureau has increased materially during the past year, during which persons to the number of 18,365, as compared with 15,198 for the year previous, sought admission to the islands, and 21,436, as compared with 19,606 for 1912, departed from the islands. Of the number who entered, 4,408 were immigrants, and of those departed, 768 were emigrants, showing an apparent gain to the islands of 3,640 new residents, as compared with 1,807 for the year 1912. Included in the total number coming to the islands are 194 persons to whom admission was denied, and in the number of those leaving the islands are included 184 persons deported for violation of the immigration, Chinese exclusion, or opium laws. During the year

6,538 Filipinos departed from the islands, 5,180 going to Hawaii, while only 1,428 returned from abroad. These figures compared with those for the previous year show an increased number of Filipino tourists and emigrants, particularly in the number emigrating to Hawaii. American citizens to the number of 4,459 left the islands and 4,177 entered during the year. There was a considerable increase in the number of Chinese and Japanese immigrants, a 90 per cent increase of East Indians, and a slight increase in the other principal nationalities.

At the port of Manila 2,250 persons were detained as aliens belonging to the excluded classes and brought before boards of special inquiry. This is an increase of 1,067 over the fiscal year 1912, and means practically a doubling of the volume of work devolving upon these boards. Of the total number of cases acted upon by boards of special inquiry, 1,623 were landed on the showing made; 20 were landed by the insular collector on appeal from the boards' decision; 182 were found inadmissible, and 208 cases were still pending at the close of the fiscal year. Of these cases 1,849 were Chinese, the majority of them being detained for investigation as to their status as minor sons of resident merchants.

The recommendation made in previous reports that suitable buildings for the immigration and detention station at Manila be constructed is renewed, as the present building is entirely inadequate for the purpose.

PORT OF MANILA.

The collector of customs again insists in his recommendation made in previous reports for the improvement of Manila Harbor, the construction of two new piers, the building of a bulkhead and cargo sheds connecting the present government piers, the improvement of the Pasig River to provide additional berthing space for coastwise vessels, and the early erection of a new customhouse in the port district. I call attention to these recommendations in order that the necessary money may be appropriated therefor as soon as the condition of the treasury permits. The steady growth of business in the port of Manila fully justifies these expenditures, as they will greatly facilitate and cheapen the handling of cargo and stimulate both foreign and coastwise trade.

The efficiency of the arrastre plant has been greatly increased, due to the installation of six electric traveling hoists for the handling of cargo on pier No. 5 and four on pier No. 3, at a total cost of \$17,833.06. As they have proven most successful in operation and there is need for additional hoists, six more have been ordered, four for pier No. 5 and two for pier No. 3.

Considerably more cargo was handled by the arrastre plant over the government piers during the past year and with less congestion than formerly obtained. This was due largely to the use of the hoists, but other factors which contributed to that end were the increased efficiency of the labor force, the amendment to the regulations by which storage becomes due on merchandise not removed within three days after the completion of a vessel's discharge, and the increased use of motor trucks in drayage.

OTHER PORTS OF ENTRY.

The value of exports from Iloilo was actually higher during 1913 than during the preceding year, being \$7,114,612, as compared with \$6,958,612 the previous year, but imports, representing \$3,210,099, show a decrease in value of more than \$900,000 as compared with the previous year. The largest factor in this decrease was cattle. Considerable work has been done on the river walls and wharf, but shipping at that port is still handicapped by the need of additional improvements, and the suggestion made last year that work be continued by extending the wall both up and down the river is renewed. Attention is also invited to the recommendation of the insular collector of customs that a quarantine station be established at the port of Iloilo for the inspection of cattle arriving there from foreign ports, in order to facilitate the continuous supply of the heavy demand for cattle in the Iloilo district.

Although imports at Cebu show an increase in 1913 of \$280,934 over 1912, there was a material decrease in the value of exports, which made the total trade for the year at that port show a decrease of nearly \$900,000. Nothing has yet been done to provide a shed for the protection of cargo, which is now all discharged onto the wharf in the open. My former recommendation that this improvement be made is renewed.

Exports at Zamboanga show an increase over the preceding year, but imports fell off considerably, making the total foreign trade at that port less by over \$80,000 than it was in 1912.

The foreign trade at Jolo and Balabac shows a slight decrease.

BUREAU OF INTERNAL REVENUE.

COLLECTIONS.

Business conditions throughout the islands, as reflected in the collections of the bureau of internal revenue, show improvement. The following is a summary of the collections made by the bureau for the fiscal years 1912 and 1913:

Items.	1912	1913
Internal-revenue taxes.....	₱16,331,125.23	₱17,434,278.08
United States internal-revenue taxes.....	448,732.65	637,566.03
Opium taxes.....	116,729.71	91,821.10
Weights and measures taxes.....	85,595.00	123,136.90
Franchise taxes.....	187,680.21	193,781.41
Justice of peace fines and fees.....	262,213.15	394,496.90
Sisiman matadero.....	28,535.81	76,115.88
San Lazaro estate rentals.....	65,182.22	53,477.29
San Lazaro estate court costs.....	.....	65.04
Sales of public mineral lands.....	441.42	324.70
Subscriptions to publicity fund.....	11,460.32	15,567.58
Total.....	17,537,695.72	19,020,630.91
Municipal taxes, city of Manila.....	3,646,472.58	3,764,135.05
Grand total.....	21,184,168.30	22,784,765.96

This table shows that the total collections for the year are over 7½ per cent greater than the collections of last year, the greater part of this increase being due to the increased output from manufactories of taxable articles and the general improvement in business conditions.

The following table shows the internal-revenue tax collections made during the fiscal years 1912 and 1913, and the increase or decrease of the different items during the past fiscal year:

Source.	1912	1913	Increase.	Decrease.
Distilled spirits:				
Domestic.....	P2, 713, 061.06	P2, 658, 066.02		P54, 595.04
Imported.....	336, 623.34	298, 006.49		38, 616.85
Wines and imitation wines:				
Domestic.....	60, 083.89	63, 782.96	P3, 699.07	
Imported.....	113, 307.39	105, 958.46		7, 348.93
Fermented liquors:				
Domestic.....	178, 650.00	146, 550.00		32, 100.00
Imported.....	23, 528.34	18, 787.80		4, 740.54
Smoking and chewing tobacco:				
Domestic.....	205, 451.66	282, 424.53	76, 972.87	
Imported.....	77, 573.79	116, 780.95	39, 207.16	
Cigars:				
Domestic.....	255, 687.58	228, 284.03		27, 403.55
Imported.....	13.31	7.49		5.82
Cigarettes:				
Domestic.....	4, 376, 711.95	4, 456, 739.09	80, 027.14	
Imported.....	1, 968.51	3, 152.02	1, 183.51	
Matches:				
Domestic.....	246, 860.00	245, 390.00		1, 470.00
Imported.....	123, 796.45	125, 300.50	1, 504.05	
Dealers in alcohol and tobacco products.....	556, 128.09	666, 330.16	110, 202.07	
Merchants, manufacturers, and common carriers.....	1, 934, 586.74	2, 238, 952.35	304, 365.61	
Occupations, trades, and professions.....	569, 095.20	604, 646.29	35, 551.29	
Cedulas personales.....	3, 643, 117.80	4, 180, 197.00	537, 079.20	
Banks and bankers.....	245, 086.31	271, 241.51	25, 155.20	
Insurance companies.....	32, 133.80	32, 073.91		59.89
Forest products.....	354, 685.37	390, 663.85	35, 978.48	
Documentary stamps.....	272, 935.35	300, 784.24	27, 848.89	
Miscellaneous.....	39.30	158.43	119.13	
Total.....	16, 331, 125.23	17, 434, 278.08	1, 279, 893.67	164, 340.62

The above table shows that collections under the provisions of the internal-revenue law have increased 6½ per cent, the largest single item being the increase of over a half million pesos in the cedula tax. Increases are also shown in the collection of United States internal-revenue taxes on Philippine tobacco products shipped to the United States in weights and measures fees, franchise taxes, justice of peace fines and fees, Sisiman matadero, city of Manila taxes, and subscriptions to the publicity fund, while decreases are shown in collections under the opium law, San Lazaro estate rentals, and in sales of public mineral lands.

Of the total amount of internal-revenue collections during the year there accrued to the insular treasury P9,483,394.74, to provincial treasuries P4,690,657.53, and to municipal treasuries P3,260,225.81, as compared with P9,010,688.68, P4,293,099.13, and P3,027,337.42, respectively, for the fiscal year 1912.

The following table shows the city of Manila taxes and other revenues collected during the fiscal years 1912 and 1913:

Items.	1912	1913
Real estate tax.....	P1, 299, 436.79	P1, 365, 430.79
Matadero receipts.....	113, 204.01	99, 145.38
Market receipts.....	319, 666.05	358, 711.65
Municipal licenses.....	217, 432.72	215, 219.33
Rentals of city property.....	26, 484.55	25, 113.30
Municipal court receipts.....	115, 243.59	123, 109.95
Pail system.....	63, 863.99	63, 250.86
Odorless-excavator service.....	20, 160.00	16, 884.00
Building permits.....	27, 086.78	27, 084.97
Water rents.....	312, 923.43	369, 151.80

Items.	1912	1913
Board of health fees.....	P4,715.30	P4,036.70
Justice of peace and sheriff's fees.....	18,841.34	24,086.94
Cementerio del Norte.....	27,583.27	28,457.28
Franchise taxes.....	60,876.64	64,326.91
Rice sales.....	225,058.66	874.72
Construction and repair of streets, bridges, sidewalks, and curbs.....	83,901.23	79,347.50
Transportation, insular government.....	105,435.96	69,643.15
Other minor receipts, miscellaneous and internal-revenue dividend.....	604,558.27	830,259.82
Total.....	3,646,472.58	3,764,135.05

COST OF COLLECTION.

The cost to the government of making these collections, including the enforcement of certain laws, ordinances, and regulations which are not revenue measures, was ₱600,044.26, as compared with ₱644,109.24 for the previous fiscal year. The above-mentioned sum includes the amount appropriated for the bureau and ₱100,000 received from the city of Manila for the assessment and collection of city taxes and charges, but does not include the expense of collections incurred by provincial governments. In addition to the amount above mentioned the sum of ₱21,164.51 was expended from the opium fund in the enforcement of the opium law.

The cost of collections has gradually decreased from 5 centavos for each peso collected in 1907 to 2.64 centavos for each peso collected during the fiscal year 1913. This result has been achieved by constant endeavor each year to economize in the expenses of the bureau and by increased efficiency of the personnel.

The expenses of the bureau which in the fiscal year 1908 were ₱700,000, including ₱20,817 received from the opium fund, have been reduced in the fiscal year under consideration to ₱600,044.26. It will be seen that in 1908 the total collections were ₱14,339,773.15, while they amounted to ₱22,784,765.96 for the year 1913.

It is also worthy of note that a greater saving has been effected during the past fiscal year than during the four years preceding. This is due to a more systematic and practical organization of the bureau, and to the substantial progress made toward the Filipinization of the service. Formerly all internal revenue agents were Americans. Now new positions of assistant agents, filled by Filipinos, have been created, the purpose being to have these Filipino assistant agents in time take the place of the American agents. These changes have produced all the satisfactory results hoped for, and have made possible a reduction in the number of employees of the bureau from 430 at the close of the fiscal year 1912 to 409 at the close of the past fiscal year. The number of Americans in the bureau has also been reduced from 85 to 48, while, on the other hand, the number of Filipinos has increased from 345 to 361. For all this the present active and intelligent chief of the bureau, Mr. William T. Nolting, deserves entire credit.

ALCOHOL PRODUCTS.

Distilled spirits.—The total output from registered distilleries during the year was 11,276,298 proof liters, a slight falling off from the previous year, due principally to the shortage of palm sap (tuba), caused by the drought. Of this amount 667,277 liters were removed

without payment of tax, 5,487 liters of this amount being for the medical department of the United States Army and 661,790 liters being denatured alcohol for industrial purposes. This was some 60,000 liters less denatured alcohol than was used last year.

On June 30, 1913, there were in operation throughout the islands 75 registered stills of modern type, as compared with 70 in operation on the same date of the preceding year, 67 on June 30, 1911, 68 on June 30, 1910, and 78 on the same date of 1909. Forty-two illicit stills were captured during the year by internal-revenue agents, five more than were captured last year.

Wines.—The following comparative statement shows the quantity in gauge liters of domestic and imported wines and imitation wines on which taxes were collected during the fiscal years 1912 and 1913:

	Domestic.		Imported.	
	1912	1913	1912	1913
Containing not more than 14 per cent alcohol.....	603,313	649,719	977,551	935,780
Containing more than 14 per cent alcohol.....	76,057	78,257	113,505	98,784
Sparkling wines.....			16,412	13,505
Total.....	679,370	727,976	1,107,468	1,048,069

This table shows an increase in the consumption of the domestic product and a decrease in imported wines.

Fermented liquors.—Taxes were collected during the year on 4,133,-445 gauge liters of beer, of which 3,663,750 liters were of domestic manufacture and 469,695 liters were imported, as compared with 5,054,458 gauge liters for 1912, of which 4,466,250 liters were of domestic manufacture and 588,208 liters were imported.

Twenty-one thousand three hundred and eighty-seven liters of domestic beer were exported during the year, as compared with 6,703 liters exported during the fiscal year 1912. The total output of domestic beer during the fiscal year is less than that during the preceding year by 787,816 liters.

TOBACCO PRODUCTS.

Smoking and chewing tobacco.—The following statement shows the quantity of smoking and chewing tobacco on which taxes were collected during the fiscal years 1912 and 1913:

Kind.	Domestic.		Imported.	
	1912	1913	1912	1913
Smoking.....	<i>Kilos.</i> 229,404	<i>Kilos.</i> 382,280	<i>Kilos.</i> 94,056	<i>Kilos.</i> 106,118
Chewing.....	193,961	203,429	71,672	136,606
Total.....	423,365	585,709	165,728	242,724

In addition to the above there were exported from the islands 52,290 kilograms of smoking tobacco, an increase over 1912 of 22,624 kilograms.

Cigars.—The total production of cigars for the year was 305,651,429, a gain over the preceding year of 20,732,584. Of the total number manufactured 102,894,077 were shipped to the United States, 106,563,541 were exported to foreign countries, and 96,193,811 were consumed in the islands, the figures for the fiscal year 1912 being, respectively, 70,518,050, 104,476,781, and 109,924,014.

During the year a strike occurred in all the larger Manila factories which threatened for a time to seriously cripple the cigar industry. The strike was aimed against certain regulations promulgated by the bureau of internal revenue for the purpose of making effective a provision of the internal revenue law regarding the registration of cigar makers. The purpose of the law was to protect the revenues by furnishing the government a check on all cigar makers, including those working in their own homes. Concessions were made and a system of registration fairly satisfactory to all concerned has been put in force. One noticeable effect of the settlement of this strike has been a better understanding between the government, the cigar manufacturers, and their employees, as is evidenced by the almost entire absence of strikes since that time. During the year 1912 there were, in addition to the strike against the regulations which affected all the larger Manila factories, 10 other strikes, while in the period of eight months between the end of the strike due to such regulations and June 30, 1913, there was a strike in but one factory, and that was of minor importance.

Cigarettes.—The total production during the year was 4,500,771,926; of this number 4,449,340,088 were consumed in the Philippine Islands and 51,431,838 were exported, as compared with 4,369,153,048 and 35,776,760, respectively, for the fiscal year 1912. By far the greater part of the cigarettes exported have gone to China, 29,141,939 having been shipped to that country during the last fiscal year. The consumption in the United States has increased from 3,061,900 in 1912 to 14,246,250 for 1913.

Leaf tobacco.—The following statement shows the quantity of leaf tobacco produced, exclusive of that consumed by the growers themselves, the quantity used in the manufacture of cigars, cigarettes, smoking and chewing tobacco, and the quantity exported during the calendar years 1911 and 1912:

	Calendar year.	
	1911	1912
	<i>Kilos.</i>	<i>Kilos.</i>
Leaf tobacco on hand by dealers and manufacturers at beginning of calendar year.	18, 072, 981	20, 937, 655
Production.....	28, 388, 519	30, 431, 004
Total.....	46, 461, 500	51, 368, 659
Quantity used in the manufacture of:		
Cigars.....	2, 523, 959	3, 222, 745
Cigarettes.....	7, 368, 671	7, 774, 743
Smoking tobacco.....	227, 335	400, 600
Chewing tobacco.....	190, 021	204, 063
Total.....	10, 309, 986	11, 602, 151

	Calendar year.	
	1911	1912
Exported in the leaf: ¹	<i>Kilos</i>	<i>Kilos.</i>
To the United States.....	2, 208	41, 932
To other countries.....	12, 658, 320	12, 518, 917
Total.....	12, 660, 528	12, 560, 849
Disposed of through retailers to consumers (no tax is imposed on cigars and cigarettes made by hand by the actual consumers thereof), and shrinkage.....	² 2, 553, 331	1, 726, 170
Total.....	25, 523, 845	25, 889, 170
Balance on hand by dealers and manufacturers at end of calendar year.....	20, 937, 655	25, 479, 489

¹ There were also exported 408,317 kilos of cuttings, clippings, and waste during 1912.

² Includes waste tobacco used for industrial purposes.

NOTE.—All figures given above are for unstemmed leaf.

MATCHES.

The quantity of matches consumed in the islands is slightly in excess of the previous year's figures. The proportion of domestic matches used is about the same, namely, one-third of the total production.

LICENSE TAXES.

Dealers in alcohol and tobacco products.—As will be seen from statement of internal-revenue taxes the collections from this source were over ₱100,000 greater than during the year 1912, an increase of nearly 20 per cent.

Merchants, manufacturers, and common carriers.—The volume of business in the islands as indicated by these collections continues to show a steady increase. The total amount collected as percentage tax was ₱2,238,952.35, as against ₱1,934,586.74 in 1912. Of this amount 93.1 per cent was paid by merchants, 5.46 per cent by manufacturers and 1.5 per cent by common carriers. The revenue derived under this head from common carriers is small, for the reason that vessels paying customs tonnage dues and railway lines paying a franchise tax are exempt from the payment of this tax. The increase in the percentage taxes collected from merchants and manufacturers is 15.9 per cent.

Occupations, trades, and professions.—The sum of ₱604,646.29 was collected under this head, being ₱35,551.09 more than was collected from the same source the previous year. Of the above amount 70.9 per cent was paid by cockpits and theaters, 10.1 per cent by lawyers, doctors, civil engineers and surveyors, and 19 per cent by all other occupation-license taxpayers. Additional taxes on cockpits were imposed by municipal ordinances in 610 municipalities. In 43 municipalities no cockpit licenses were issued.

CEDULAS PERSONALES.

An increase of ₱537,079.20 over last year is shown in the collection of cedula personales, or certificates of registration. The increased cedula tax is in force for the calendar year 1913 in the same 33

provinces in which it has been in force for the three preceding years. Over 89.3 per cent of the cedulae sold during the year were without delinquency charges added.

BANKS AND INSURANCE COMPANIES.

The average monthly deposits with banks show a steady increase. For the calendar year 1912 they were ₱29,734,077, while for 1911 they were ₱27,341,834, not including deposits with postal savings bank. The average capital increased from ₱14,397,041 in 1911 to ₱14,624,800 in 1912.

The business of the insurance companies shows an increase in most lines of insurance. The following table shows the total amount of insurance during the calendar years 1911 and 1912, based on the taxes paid:

	1911	1912
Life.....	₱24,537,604.50	₱26,510,480.33
Fire.....	132,299,960.13	159,019,638.36
Marine.....	110,911,246.28	145,064,016.51
Accident.....	615,000.00	585,000.00
Fidelity and surety.....		2,755,278.19
Typhoon and earthquake.....	1,710,500.00	1,015,410.00
Total.....	270,074,310.91	334,949,823.39

OPIUM.

The receipts during the year derived from the enforcement of the opium law, composed almost exclusively of fines, amounted to ₱91,821.10. This is ₱24,908.61 less than was collected in 1912, the decrease being due to the decrease in the illegal use of opium.

Since May, 1908, on which date the absolute prohibition of opium, except for medicinal purposes, became effective, the revenue features of the opium law have been insignificant. Violations of this law are therefore now different in no respect from violations of any other penal laws, and there is no reason why the constabulary and municipal police, whose duty it is to detect and prevent violations of all penal laws, should not be charged as well with the detection and prevention of violations of the opium law. In view of this, on May 8, 1913, the Governor General approved a plan whereby the enforcement of the opium law is given over to the constabulary and the police force of the different municipalities. As the field of operations of internal-revenue agents with respect to the opium traffic was thus reduced to work of a purely supervisory character, it logically followed that these agents should have nothing to do with the enforcement of the customs laws, and there remained no reason for continuing in existence the force of joint customs-internal revenue agents. Accordingly the arrangements entered into in the latter part of 1910, providing for a number of joint customs-internal revenue officers to prevent the illegal importation of opium and enforce the provisions of Act 1761, was done away with, effective June 30, 1913. Hereafter, the bureau of customs will devote its efforts to the prevention of the smuggling of opium, while the enforcement of Act No. 1761 will be left to the constabulary and the local police forces.

FRANCHISE TAXES.

Franchise taxes to the amount of ₱193,781.41 were collected during the year, as compared with ₱187,680.21 collected from the same source during the fiscal year 1912, an increase of ₱6,101.20, or over 3 per cent. Of the amount collected under this head, ₱124,807.02 accrued to the insular treasury, ₱66,475.96 to Manila and other municipal treasuries, and ₱2,498.43 to provisional treasuries.

SAN LAZARO ESTATE RENTALS.

The following is a summary of work accomplished during the year in the collection of rentals from the tenants of the San Lazaro estate:

Sites rented July 1, 1912.....	2,278
Sites rented June 30, 1913.....	2,218
Tenants June 30, 1913.....	1,406
Amount collected.....	₱53,477.29
Amount delinquent June 30, 1913.....	9,747.25

PUBLICITY FUND.

During the year 93 subscribers voluntarily contributed ₱15,567.58 to the general publicity fund for the purpose of advertising Philippine products and interests.

Full details of the operation of the judiciary and the various bureaus under this department will be found in the reports of the attorney general, the insular treasurer, the insular collector of customs, and the collector of internal revenue.

Respectfully submitted.

GREGORIO ARANETA,
Secretary of Finance and Justice.

To the PHILIPPINE COMMISSION.

REPORT OF THE SECRETARY OF PUBLIC INSTRUCTION.

DEPARTMENT OF PUBLIC INSTRUCTION,
Manila, September 23, 1913.

GENTLEMEN: I have the honor to present herewith the twelfth annual report of the secretary of public instruction. Except where otherwise stated, the report covers the period between July 1, 1912, and June 30, 1913.

BUREAU OF EDUCATION.

ENROLLMENT.

At the end of the school year in the month of March there were in operation 2,595 primary schools, 296 intermediate schools, and 43 secondary schools, employing 658 American and 7,013 Filipino teachers; while at the end of the preceding school year in March, 1912, there were in operation 3,364 primary schools, 283 intermediate schools, and 38 secondary schools, employing 664 American and 7,696 Filipino teachers. During the year 440,050 pupils were enrolled with an average daily attendance of 287,995. During the preceding year there were 529,655 pupils enrolled with an average attendance of 329,073. It will be noted that the daily enrollment was considerably less, but that the average of attendance increased from 60 to more than 65 per cent.

In this connection I desire to present the following table:

Grades.	Average daily attendance.			
	1909-10	1910-11	1911-12	1912-13
Primary:				
I.....	191,498	209,119	171,168	139,271
II.....	60,930	74,232	69,909	57,560
III.....	31,461	33,125	39,290	37,279
IV.....	14,062	17,386	22,479	24,309
Intermediate:				
V.....	7,600	9,466	10,950	11,105
VI.....	4,234	6,042	7,190	8,370
VII.....	2,480	3,402	4,608	5,820
Secondary:				
First.....	1,127	1,603	1,971	2,296
Second.....	490	624	796	997
Third.....	286	282	452	583
Fourth.....	166	241	260	405
Total.....	314,334	355,522	329,073	287,995

It will be noted that in school enrollment there has been a further considerable decrease, which will be discussed a little later on.

In other respects school work has shown a steady and material advance. Improvement in the personnel of teachers, both American and Filipino, has been marked; particularly so as regards the

latter. A higher average qualification in the case of American teachers has been secured through careful personal selection of appointees in the United States, while the improvement in the Filipino teachers has resulted from encouraging them to study and improve their knowledge of English, and from the elimination of many who had not shown particular aptitude for teaching.

Before taking up the various activities of the bureau, I wish to discuss the reasons for the large decrease in enrollment and the remedy therefor. Attention was invited in the last annual report of this department to the decrease in the number of pupils, although it was then intimated that the decrease in the efficiency of the public schools was more imaginary than real. This, however, can no longer be claimed. Speaking of the situation in his report, the director of education says:

(1) When schools were first started after the American occupation, the pupils presenting themselves for instruction were for the most part in the lowest grades. To-day, however, there are 30,692 pupils in the intermediate and 6,111 in the secondary grades. This shows an increase of 13,943 over the 1909 enrollment for the last month (March) of the 1912-13 school year.

(2) Filipino teachers formerly were willing to teach for meager salaries because of the educational advantages offered them through teachers' classes and other similar agencies. Now 50 per cent of the Filipino teaching force of the bureau of education has completed the intermediate course, and must be paid a living wage.

(3) Before the bureau of education adopted a definite program for industrial instruction, the expenditures for this purpose amounted to very little. At the present time 120 American and 610 Filipino teachers are engaged entirely in industrial work. The cost of industrial instruction reaches the approximate sum of ₱744,000 annually.

(4) Before 1910 very little money was spent for the erection of permanent school buildings, reconstruction work, or for the acquisition of suitable school sites. During the calendar year 1909 these expenditures totaled ₱237,000; in 1910, ₱771,000; in 1911, ₱518,000; and in 1912, ₱486,000.

(5) At the present time there is an insistent demand throughout the country for public school facilities. A few years ago pupils were kept in school through the personal influence of their teachers and, in certain municipalities, the officials made attendance practically compulsory. It was formerly possible to meet the new demands on the bureau of education by limiting activity in other directions. A limitation of the activities of the bureau now in any line is resented, even though such action may be taken in order to permit of meeting a more urgent need elsewhere.

These changed conditions have caused constantly increasing demands upon school funds, which have been correspondingly increased. In fact, municipal receipts for school purposes during the year 1912 fell below those for the previous year. The total amount of money available from insular sources for the year 1909 was ₱3,666,000; for 1910, ₱3,882,000; for 1911, ₱3,610,000; and for 1912, ₱3,610,000; that is, the total appropriations for school work have been materially decreased. It is apparent, therefore, that with increasing demands on the bureau and with decreased rather than increased appropriations, retrenchment somewhere was necessary.

Quoting again from the report of the director of education:

First, the permanent building program might have been abandoned. In view of the fact, however, that the first act of the Philippine Legislature was to appropriate funds for the construction of permanent school buildings, such action would involve disregard of the expressed will of the legislature. Furthermore, it would have been unwise from every point of view. These schools simply could not be continued longer in the very inadequate and insanitary buildings which were almost the only ones available a few years ago.

Second, industrial education might have been abandoned. It is certain, however, that no thinking man could have conscientiously recommended such action.

Third, the situation might have been relieved somewhat by keeping the salaries of Filipino teachers at the very lowest possible minimum. The inevitable result of such action, however, would have been most disastrous, since it would have occasioned the loss of a very large number of the most efficient of the Filipino teaching force. Even under existing conditions this bureau loses many good teachers annually to other branches of the government and to business houses offering better salaries than this bureau is able to pay.

Fourth, the number of American teachers might have been greatly reduced. In view of the fact that American teachers have been assigned for the most part as supervising teachers and as classroom teachers in secondary grades, for which positions there is not a sufficient number of properly trained Filipinos, an appreciable reduction is not yet advisable.

The only logical relief obtainable was either through limiting to a considerable extent the amount of primary instruction by closing barrio schools or by reducing the number of intermediate and secondary school pupils to the number enrolled during the school year 1909-10. The first was chosen for a number of reasons. In the first place, the country needed a large number of well-trained young men and women as teachers and workers along similar lines. The schools to date have not been able to produce a sufficient number of this class. Moreover, the people who have had a voice in affairs have always been much more interested in intermediate and secondary instruction than in the extension of primary schools to the barrios. The director of education and his official superiors are constantly in receipt of letters protesting against the closing or demanding the opening of intermediate schools. During the past three years this bureau has received more than six times as many communications asking for an extension of intermediate instruction as for an extension of primary instruction. Representatives of the insular government traveling through the provinces are met with requests from every section for the extension of intermediate instruction. Their attention is very rarely indeed called to the desirability of extending primary instruction.

The action taken reduced the number of schools to a dangerously low minimum. The situation created was a serious one. However, his excellency the Governor General, by an additional allotment to the bureau of education, made possible the opening of 1,000 primary schools, in which it was desired to enroll at least 100,000 additional pupils at the opening of the 1913-14 school year. At this writing the approximate minimum increase has been secured, notwithstanding the fact that reports have not yet been received from a number of school divisions on account of normal institute sessions held at the beginning of the school year. The increased enrollment secured will greatly exceed the minimum figure desired.

This action provides a remedy for the decreased attendance in the public schools, but it does not in any sense relieve the pressure on the bureau of education caused by the promotion of large numbers of pupils from the lower to the higher grades in those schools which have been in operation for some time. This pressure is becoming so great that the bureau of education, in default of an increased appropriation, will in a short time be again compelled to choose between one of two alternatives—to reduce the total number of schools or to limit the amount of higher instruction given.

It is evident that we must either increase the amount of money to be expended by the bureau of education or else limit the number of pupils to be given secondary instruction. The opening of these additional primary schools will only intensify our difficulty if the present policy of expansion is adhered to.

The youth of the Philippines are anxious to obtain an education, and their parents are willing to make many sacrifices in order that they may do so. A large number of those who complete the primary course desire to enter intermediate schools, and of those who graduate from the intermediate schools almost all wish to attend high school. Years ago, before these difficulties were realized, the bureau of education established a high school in every province. Few of these schools were properly equipped, and the instruction given in many of them was not of the character that should be expected in secondary schools. Owing to the great demand for the opening of intermediate schools by parents whose children had completed the primary course, many have been established which can only be maintained at considerable cost.

After a careful study of this question, it is believed that the following is the only feasible solution:

It is assumed that at this time appropriations for school purposes can not be materially increased; in fact, with the present decrease in revenues, it will be difficult to keep the appropriation equal to the amount which the bureau has heretofore had. The first duty of the government is to give all children primary instruction. To learn to read and write and to understand something of arithmetic and geography is essentially necessary to the development of the masses of the people to that point where they may be individually competent and capable of performing the ordinary duties of a citizen. Advanced education is desirable, but it is not essential for all. The country needs and will continue to need a limited number of men of higher training, and this training, when given at all, should be given thoroughly.

Instead of a mediocre high school in each province, efficient district high schools should be established. If the Archipelago were divided into some eight or nine districts, and a high school, limited in its enrollment, maintained in each district, it could be much better equipped than the high schools are at present, the qualifications of the teachers could be much improved, the expense of pupils from other provinces paid, and a large saving in the total cost of our high schools still effected. Intermediate schools should likewise be established at central points, with reference to the needs of the whole country rather than to the desires of the people of a particular locality. The number of pupils receiving instruction beyond the primary grades would necessarily be limited. Each school subdivision would have a number of pupils eligible for higher instruction, the number to be based upon the school population of the district, and the pupils to be given this higher instruction would be selected upon the basis of scholarship and health. This plan, when carried out, would permit all of the children of the islands to have the benefit of primary schools; a selected number of primary graduates would receive intermediate instruction, and a smaller, but still selected, number of intermediate graduates would receive high school instruction.

By this consolidation of schools in which most of the teaching personnel is now American, the total number of teachers of that nationality could be greatly reduced, and appropriations equal to those now made would suffice to carry on the entire system until such time as a greater degree of economic prosperity may permit the collection of more taxes and provide larger revenues for school purposes. This plan of selection should be continued in the university, as, of course, the resources of the country are inadequate to provide a university education for all who desire it.

This matter presents a serious situation which must have prompt and radical treatment. It is not possible to give all the young men and women of these islands either intermediate or secondary instruction, but it is possible to give primary instruction to all, and to a few, whose merit has been proved and whose capacity is most marked, advanced opportunities. Unless a limit is fixed to intermediate and secondary schools, the school enrollment will continue to decrease.

SCHOOL STRIKES.

During the past year there have been several cases where, because of some grievance, real or fancied, a number of pupils have "walked out," and in some cases even tried to prevent their fellows from attending school. They have then attempted to force the bureau of education to take such action as they, the pupils, demanded. The bureau of education has taken the position that a pupil who leaves a school under such circumstances has voluntarily surrendered his membership in the school; that if the student believes that he is suffering from some injustice, he should take the matter up through the proper channels, to the highest authority in the islands, if necessary, for determination, but that under no circumstances can he leave the school and still maintain membership in it. This policy has been specifically adhered to by the bureau, and it is believed that strikes of this character are not likely to occur often in the future. So far as the truth can be learned, it seems that the parents of the children have in no case really sustained their actions; but that this method of adjusting differences has been utilized by local politicians to serve personal ends.

LEGISLATION.

The following is a résumé of legislation, directly or indirectly affecting the bureau of education, which was enacted during the year:

The first-named acts are of direct interest to the bureau of education providing as they do appropriations for the conduct of the work.

Act No. 2194 appropriates ₱53,750 for the improvement of teachers' camp at Baguio and ₱60,000 for school buildings in non-Christian provinces.

Act No. 2208 appropriates the sum of ₱253,700 for the conduct of schools in the non-Christian provinces for the calendar year 1913.

Act No. 2218 appropriates the sum of ₱50,000 for the maintenance of the school of household industries in Manila.

Act No. 2219 appropriates ₱30,000 for the support of student pensionados in insular schools.

Act No. 2262 appropriates ₱50,000 for the construction of a building, to be known as the José Rizal School, in the municipality of Calamba, Laguna.

Act No. 2264 appropriates ₱275,000 for the construction of buildings for the Philippine School of Arts and Trades and ₱150,000 for aid in the construction of central school buildings.

No general appropriation act was passed by the Legislature, and, as a consequence, the bureau of education as well as other bureaus, will depend for support on funds allotted by the Governor General under authority given him by law to allot funds for the support of the government in case of failure of the Legislature to pass a general appropriation bill.

In addition to the appropriation acts enumerated above, the following directly affect the bureau of education:

Act No. 2198 authorizes the secretary of public instruction to make an allotment from the funds appropriated under the Gabaldon Act for the construction of a school on land belonging to the Government of the United States in the naval reservation at Olongapo, Zambales.

Act No. 2217 authorizes municipal councils to appropriate at the beginning of each year a certain part of school funds for the creation and maintenance of night schools in English.

Act No. 2249 gives to the Governor General on behalf of the Philippine Islands, and to municipalities and provinces, the right to expropriate real property for public uses. This act confers on courts of first instance exclusive original jurisdiction in such cases.

Among the large number of acts passed during the year the following do not affect the bureau of education directly, but are of indirect interest to it:

Act No. 2225, appropriating the sum of ₱100,000 for the Philippine Exposition to be held in the city of Manila during the year 1914. Such an exposition is authorized under the provisions of act 2224.

Act No. 2226, appropriating the sum of ₱150,000 for the establishment and maintenance of stations for practical instruction in matters concerning agricultural demonstration and development.

Act No. 2231, authorizing municipal councils under certain conditions to close municipal roads, streets, alleys, parks, or squares for governmental purposes.

Act No. 2238, providing for the revision and correction of land tax assessments.

Act No. 2239, providing that until January 1, 1920, both English and Spanish under certain conditions shall be official languages.

Act No. 2253, appropriating the sum of ₱45,000 to provide for the creation of 20 scholarships in the government forest school at Los Baños; for the maintenance of 33 scholarships already created; and for the salaries, traveling expenses, and equipment of graduates of the school.

Act No. 2259, providing for a cadastral survey, is one of the most important pieces of legislation of recent years.

Act No. 2260, appropriating the sum of ₱625,000 for the University of the Philippines for the fiscal year 1914.

PUBLICATIONS.

The following publications were issued during the year:

Bulletin No. 44, Libraries for Philippine Public Schools.

Bulletin No. 45, The School of Household Industries.

Bulletin No. 46, The Industrial Museum, Library and Exhibits of the Bureau of Education.

Bulletin No. 47, Good Manners and Right Conduct (for use in primary grades). Although good manners and right conduct have been taught in the public schools for a number of years, it was found advisable to prepare a comprehensive bulletin to serve as a teachers' guide.

Bulletin No. 51, The Philippine School of Commerce, 1913.

Bulletin No. 52, The Philippine School of Arts and Trades, Nautical Department, 1913.

Bulletin No. 53, Elementary Course in Plain Sewing.

A Talk on Health Conditions in the Philippines. Dr. Victor G. Heiser, director of health.

Civico-Educational Lecture No. 8—Corn.

The Teachers Assembly Herald (vol. No. 6).

The Twelfth Annual Report of the Director of Education.

Supplementary Problems for Trade Schools and Trade Classes in the Philippine Public Schools.

The Philippine Craftsman. The first issue of this magazine, which is published monthly during the school year, was printed in July, 1912. Articles dealing with industrial subjects only are published in it, and, through its wide circulation, it keeps even the more remote divisions in touch with all phases of industrial work. It has attracted favorable attention from prominent European and American educators.

In addition to those enumerated above, the following textbooks, bulletins, etc., are in course of preparation and will be distributed in the near future:

Bulletin No. 31 (revised), School and Home Gardening.

Bulletin No. 40 (revised), Athletic Handbook.

Bulletin No. 48, A Course in Civics.

Bulletin No. 49, Philippine Industrial Fibers.

Bulletin No. 50, Arbor Day and School Holidays.

Economic Conditions in the Philippines.

Housekeeping—A Textbook for Girls in the Public Schools of the Philippine Islands.

Philippine Mats (Reprint from the Philippine Craftsman, Vol. No. II).

BUILDINGS AND SITES.

Definite progress has been made in the matter of securing sites and erecting buildings for school purposes. Each barrio school must have a site containing at least 5,000 square meters, and each central school one of at least 10,000 square meters, before the expenditure of insular funds for construction will be permitted; and, where permanent buildings can not be erected because of lack of funds, temporary buildings must be constructed in accordance with plans prepared by the general office. There are now in the islands 1,032 standard school sites, of which 643 contain from 5,000 to 10,000 square meters, and 389 exceed the latter area. Of this total number, 311 barrio and 252 central sites were secured during the last fiscal year, while 111 standard plan schoolhouses, containing a total of 435 classrooms, were completed. This brings the total number of standard plan school buildings constructed since the passage of the original Gabaldon Act up to 180; yet, although this represents no little progress, a beginning in adequately supplying the needs of the islands has scarcely been made.

The large and commodious normal school building was completed and occupied at the beginning of the school year; the new girls' dormitory is in process of construction; and the necessary funds have been made available for the Philippine School of Arts and Trades. Taken all in all, the building program is thoroughly satisfactory.

INSULAR SCHOOLS.

The bureau of education maintains entirely with its own revenues, and under the direct control of its officers, five schools, membership in which is open to students from all parts of the islands. These are the Philippine Normal School, the Philippine School of Arts and Trades, the School of Household Industries, the Philippine School of

Commerce, and the School for the Deaf and Blind. In addition to these the Girls' Dormitory is supported entirely by insular funds.

The Philippine Normal School.—This school is devoted exclusively to the training of teachers. Not only are academic and pedagogic subjects taught, but instruction is given in all branches of industrial work represented in the public schools. All students are required before graduation to teach at least one class a day for two years, and this teaching covers all subjects of the primary and intermediate grades.

One hundred and twenty student teachers are in charge of training classes each day, their work being directed by 10 critic teachers. Ninety-seven per cent of those who graduated during the last three years have entered the teaching service, and not one of these has abandoned his profession. In June, 1913, the school opened with a total enrollment of 1,460 young men and women, 690 of whom were taking the regular normal school work, the remainder being in the training department. The faculty consists of 24 American and 22 Filipino teachers. The grounds surrounding the new building have not yet been fully laid out, but space is available for base ball and other athletic fields, and it is hoped soon to complete their arrangement and beautification.

The Philippine School of Arts and Trades.—This school is now most inadequately housed, and it has, therefore, been necessary to turn away a number of applicants for admission. Money is, however, available for the construction of new buildings, and when completed they will greatly increase its usefulness. The total number of pupils enrolled during the last year was 601. There was no effort made to increase the amount of commercial work done, as this is only incidental to the work of the school; yet during the year revenues from this source amounted to ₱46,090.68.

At the beginning of the school year a nautical department was established. The enrollment is limited to 40, and pupils must be at least 18 years of age, have completed the intermediate course of study, and signify their intention of following seamanship as a profession after graduation. Arrangements have been made with the Shipowners' Association whereby that body will cooperate with this department in the training of ships' officers. The students enrolled are of a high class, and bid fair to make this department a very useful one to the country, as there is constant demand for officers for inter-island vessels.

Philippine School of Commerce.—There has been considerable progress made in this school, especially in the number of well-trained pupils that matriculate for some one of its courses. Its total enrollment was 392, representing 32 provinces. Graduates from this school, or even those who have completed only part of the course, have no difficulty in obtaining employment at reasonable salaries.

School for the Deaf and Blind.—The lack of revenues has not permitted the extended development of this school, and there is a large number of both deaf and blind children in the islands who do not receive any kind of training. The enrollment during the past year was 46. The pupils are housed and subsisted at the school, and the work is handled by an American principal with four Filipino assistants.

School of Household Industries.—This school, which was established at the beginning of the year, has done satisfactory work. Its purpose is to train in several lines of household industry adult women, who are admitted under an agreement to return to their home towns and there train others in the particular class of work in which they have received instruction, so that there may be established a number of centers of household crafts, which will contribute to the income of the women engaging in them when not occupied with their ordinary duties. Two classes have now finished the course, and while it is too early to judge the results with accuracy, it is hoped that the creation of these industries will prove of great benefit to economic conditions in the Archipelago.

SCHOOLS FOR NONCHRISTIANS.

Owing to peculiar conditions which existed in the early days of American occupancy, certain provinces obtained the name, now well engrafted in the law, of non-Christian Provinces. These provinces, for which laws are passed by the Philippine Commission acting alone, are Nueva Vizcaya, Agusan, and the Mountain Province. For the work in these provinces, there was appropriated last year the sum of ₱253,700, exclusive of moneys appropriated for the construction of school buildings. The school buildings at Cervantes and Bontoc have been completed, and in Kiangnan a beautiful building of cut stone found in the immediate neighborhood has been erected by the schoolboys themselves. Funds are also available for the construction of a building at the girls' school at Bua. The policy of maintaining schools at the principal centers of population has been continued. Some schools of the same character are maintained outside of the boundaries of the non-Christian provinces, those, for example, for the Tinguianes in Abra; the school for the Tagbanuas at Aborlan, Palawan; the school at Consocsep, Camarines; and the school for Negritos at Villar, Zambales. The effect of these schools in developing the tribes among which they are located is remarkable.

ATHLETICS.

Athletic instruction has come to be one of the important parts of school work. It is not possible to state with exactness the number of pupils who take part in athletics, but, owing to the introduction of group games and forms of play in which all may participate, it may be said that the percentage is very large, and that nearly every pupil is now getting some benefit from systematic physical exercise. During the past year two separate contests for prizes donated by Gov. Forbes were held in each school division. These contests aroused a keen interest and were productive of very beneficial results.

In connection with the Philippine Carnival in February, 1913, the Far Eastern Olympiad was held in Manila. Both China and Japan sent a number of young men, and the athletic contests lasted for several days. Almost all contestants representing the Philippines were schoolboys. Japan won the baseball championship, but in track, field, and general sports the Filipinos were victors.

A number of provincial meets are held each year. The following table shows the various meets and the winners in each case of both the baseball and the track and field sports:

Association.	Winner baseball.	Winner track and field.
Southern Luzon.....	Camarines.....	Albay.
Central Puzon.....	Nueva Ecija.....	Pampanga.
Southern Tagalog.....	Batangas.....	Laguna.
Inter-Visayan.....	Iloilo.....	Occ. Negros.
Ilocano.....	Ilocos Sur.....	Ilocos Norte.
Cagayan Valley.....	Cagayan.....	Cagayan.
Manila.....	P. S. A. T.....	City schools.

The following interscholastic records may be of interest as showing what our best school athletes have accomplished:

Philippine interscholastic records.

Event.	Record.
50-yard dash.....	5½ seconds.
100-yard dash.....	10¾ seconds.
220-yard dash.....	23 seconds.
440-yard run.....	54¾ seconds.
880-yard run.....	2 minutes 13¾ seconds.
220-yard low hurdles.....	28 seconds.
Running broad jump.....	20 feet 2½ inches.
Running high jump.....	5 feet 3½ inches.
Shot put.....	45 feet 11¾ inches.
Pole vault.....	10 feet 6¾ inches.
880-yard relay.....	1 minute 41 seconds.
Mile relay.....	3 minutes 45 seconds.

PLAYGROUNDS.

As heretofore mentioned, barrio school sites must contain 5,000 square meters and central school sites 10,000 square meters, in order that each school may have an ample playground. In connection with practically every provincial high school there is maintained a baseball field, a quarter-mile running track, and courts for group games.

TEACHERS' VACATION ASSEMBLY AT BAGUIO.

Each year the annual assembly held at Baguio during the school vacation becomes more popular. This institution was originally designed for American teachers, many of whom are located at isolated stations and have little opportunity for mental recreation. Weeks of association with large numbers of men and women engaged in similar work, in a climate more nearly that to which they have been accustomed in America, is of great benefit in stimulating them mentally and physically. Teachers' camp at Baguio now contains a considerable group of buildings, and has many conveniences for the comfort of its sojourners. Teachers who attend this assembly pay their own expenses, but the number who appreciate its advantages has been steadily increasing year by year until last season there were 437 men and women in attendance. Of these, 89 were Filipinos, and it is believed that the number will continue to increase.

Two noted educators from the United States attended the assembly and lectured upon education and cultural subjects. They were Dr. Paul Monroe, head of the department of education, Columbia University, and Dr. Edwin A. Schell, president of the Iowa Wesleyan University. The lectures were well attended and appreciatively received.

In addition to these lectures, special courses in various branches of the industrial work were given and conferences of American and Filipino teachers held for the interchange of ideas regarding the work of the bureau.

OTHER VACATION ASSEMBLIES.

The regular annual vacation assembly for Filipino teachers was held at Manila in the normal school from April 15 to May 24. One thousand one hundred and nine teachers from 36 school divisions attended. Special courses were given in school administration and management and in various phases of school work.

Except in those near Manila, normal institutes for the instruction of teachers are held annually in each school division. In former years these institutes were given over largely to academic subjects, but recently more emphasis has been placed upon industrial subjects and school administration and management.

PRIVATE SCHOOLS.

The work of standardizing the courses of instruction in the private schools and colleges of the islands and of establishing the English language as the medium of instruction, as far as possible, for all subjects has been steadily pushed during the year. In general, the institutions concerned have shown a marked willingness to become familiar with the requirements laid down by this office and make every endeavor to conform to them. There has been a marked improvement in the quality of instruction, especially in the primary and intermediate courses.

Eleven new schools have been recognized in the course of the year, three being authorized to confer the degree of bachelor of arts, two to give high school diplomas, four to issue intermediate certificates, and two to issue primary certificates only. Besides these, five others which were previously recognized as regards their lower grades have secured the government approval for the more advanced portion of their curriculums. There are still a large number of schools seeking government recognition. A few of these are well organized and will probably be approved before the close of the current year. The majority of them, however, have no permanency, and it is not probable that they will ever meet the requirements.

In 19 schools all regular academic work is carried on in English, and practically all primary and intermediate instruction is in that language. Until, however, the secondary grades come to be mainly composed of pupils who received their primary and intermediate instruction in English it is of course, impossible to impose a complete change in the language of instruction on the highest grades of these schools.

As the public schools in Manila are on a one-session basis, it has been easy to secure experienced teachers for afternoon work in private schools, and many of the regular teachers who at first could not

speaking a word of English have since become sufficiently proficient in the language to be able to use it in the classroom. One of the colleges under the control of a religious order has adopted the policy of keeping two members of its faculty in the United States or in England for study. It has also been suggested that teachers in these colleges should exchange places for certain periods with teachers of the same attainments in colleges in the United States, an arrangement which would probably be mutually beneficial.

At the close of the last school year there were 10,437 pupils enrolled in the recognized private schools, an increase of 2,555 over the preceding year. The enrollment for the current year shows a further increase. The industrial work done in private schools is, for the most part, below the standard required in the public schools. This is particularly true of the boys' colleges, where the argument is made that the pupils, being drawn, as a rule, from the wealthier class, do not need industrial training. While this contention is, from a utilitarian point of view, not entirely without force, it is believed that industrial work in these schools would furnish a diversion from the monotony of continuous academic work and that the pupils would enjoy it. There are some exceptions to these general statements in regard to industrial work, notably the Silliman Institute, at Dumaguete, which gives excellent courses in agriculture and in woodworking; the Industrial School Republic, at Jaro; and the schools of the Belgian Sisters in Manila, Tagudin, Bontoc, and Baguio, which do admirable work in lace making.

The private schools are realizing in an increasing degree the importance of physical training for their pupils. In addition to calisthenics, various athletic games have been taken up and some of the schools have made very creditable records. The Silliman Institute was the first to take prominence in this field, but lately some even of the schools under the control of religious orders have had good teams in baseball, football, and basket ball. As a general rule the private schools lack specially trained teachers for athletic work, and few of them at present have suitable grounds.

Practically all of the recognized private schools charge fees for the tuition given, but some of them maintain free schools separate from the regular classes for pupils who can not afford to pay. In most cases these are not given the standard course of study. There has been much improvement in the building and equipment of private schools and colleges, although no progress has been made since the rendering of the last report on the new building projects then under consideration by the Ateneo and several of the other colleges in Manila.

The relations of the private schools and the public schools have continued on the whole to be excellent. The regulations put in force last year, governing cases of expulsion and suspension, have been faithfully observed. Early in the present school year, however, it was necessary to lay down certain rules to prevent pupils being admitted in private schools to classes in advance of those they were qualified to enter. In general a comparison of the condition of private schools at the present time with that of a few years ago furnishes the very strongest proof of the wisdom of the policy instituted for their standardization. Greater progress may be looked for during the coming year.

BUREAU OF AGRICULTURE.

A brief summary of the general agricultural conditions during the last fiscal year may be interesting. The rice crop, one of the largest ever harvested, is estimated to have been fully 100 per cent greater than the crop of the preceding year. The high price of rice led to the planting of a larger crop than usual, and the favorable weather conditions resulted in an increased yield per hectare. As a consequence of this unusually large crop, importations of rice decreased about ₱5,000,000, and better conditions have obtained in the rice-growing provinces.

Another effect of the short rice crop of the year 1912 was to increase the acreage of corn. The corn campaign of the bureau of education and the bureau of agriculture has also stimulated the use of corn as a food. This crop, maturing in a shorter time than rice, produces much better in dry seasons.

As regards sugar, conditions have not been so favorable. The sugar produced by the small mills was of rather low grade, and low prices continued throughout almost the entire year, although conditions were somewhat improved as the year closed. Sugar exports for the fiscal year 1913 increased approximately 26,000 000 kilos, although there was a decrease of nearly ₱2,000,000 in value.

The copra crop suffered severely from two causes—the unusual drought of the previous year, and the severe typhoons which occurred so generally throughout the copra districts. Few of the coconut plantations were actually destroyed; but as about 12 months elapse between the flower and the mature fruit, the trees affected by the storms are only now again coming into bearing. This falling off in the export was about 33 per cent, but because of better prices the decrease in value was only about 29 per cent.

The tobacco crop was slightly greater than in the year 1912, and planters are beginning to give more attention to modern methods of growing and curing. The exportation of cigars has very largely developed—increasing from 175,000,000 to 207,000,000, while the exportation of leaf and miscellaneous tobacco is also rapidly increasing. The total exports of tobacco for the fiscal year amounted to ₱10,700,000.

The exportation of abacá reached the record figure in the history of the industry, owing to the unusually high price of the product. Although 6 per cent less was exported than in the previous year, its value was over 41 per cent more, the total exports amounting to more than ₱46,000,000. Owing to the severe typhoons and drought of last year, it is expected that the production of abacá will not be so large during the present year. Unfortunately the quality of the fiber and the cultural methods remain almost unchanged.

There was an increase in the exportation of some minor agricultural products—notably maguey, which increased about 84 per cent in quantity and 119 per cent in value over the exports of the preceding year. In many parts of the islands there is a tendency to give more attention to crops other than those which have heretofore composed the great bulk of the exports.

GENERAL STATEMENT.

The work of the bureau may be roughly divided into four classes: Demonstration; public service; investigation; and dissemination of information. Of the public services rendered by the bureau of agriculture, the most important continues to be the campaign against rinderpest. This has consumed approximately two-thirds of the bureau's appropriation and prevented development in other important directions. We have prevented the introduction of this disease from foreign countries by the enforcement of strict quarantine regulations. This policy has met with determined opposition in many instances, but unless we cease to bring in this disease it is almost useless to continue the expensive campaign against it. The measures used have been successful in eradicating the disease from Mindanao, the Visayas, and southern Luzon; in fact, at the close of the year there was no known rinderpest infection in the Philippine Islands south of the city of Manila. In all provinces where local officials have cooperated earnestly with the bureau of agriculture, the disease has either been entirely eliminated or very greatly reduced in amount; and of the towns infected at the close of the year, a great proportion were in one province where such cooperation had not been had. This condition we hope has now been remedied, and better results are expected.

Another difficult problem has been the attempt to control the locust plague, which has spread practically over the entire Archipelago. All available money has been expended, and much free labor given in the effort to exterminate this pest in thickly settled provinces and localities. Wherever there has been thorough cooperation, the damage has been minimized, if not entirely averted, but there are vast regions of grass lands which are uninhabited, and in these locusts breed. It is practically impossible, with the small amount of funds available, to follow flying swarms into all of these localities with a sufficient number of men to exterminate them. I believe that this pest can not be exterminated until some natural enemy of the locust is found to aid in this work. An effort is being made to secure the services of a noted entomologist who has made a thorough study of the eradication of insect pests by means of parasites, and the plague may perhaps be reduced through his efforts. But meanwhile the campaign must be continued with unabated vigor to save the crops in cultivated regions.

Another public service rendered by the bureau is the improvement of the live stock of the islands by the importation, production, sale, and loan of breeding animals. Considerable progress has been made in this field, and its effects may be seen in improved stock in many localities, but there is still room for great development of this work.

The Bureau has also made an effort to supply the people with first-class seeds, bulbs, cuttings, suckers, and plants. This seed and plant distribution reaches practically every municipality in the Archipelago, and is proving an important factor in agricultural development.

In the division of investigation, the work of the veterinary pathologist and of the entomologist should be mentioned. Each has completed a number of investigations, the results of which have been published, and are of considerable value in the control of animal

diseases and insect pests. The rice investigations which have been carried on during the past five years have now reached a point which makes it possible to determine the varieties best suited to cultivation here; and, in some degree, a similar work has been done with corn. Experiments are also being made with abacá. At the Singalong Experiment Station alone more than a thousand varieties of vegetables and forage plants were tested during the year, and at the Alabang Farm 134 varieties of bananas were permanently set out in trial plats. At the Lamao Experiment Station important experimental work is being carried on with many kinds of fruits and vegetables. Results of these experiments and investigations are published and disseminated among the farmers of the country. The publications issued include 13 numbers of the Philippine Agriculture Review, 5 bulletins, 7 circulars, and 3 reprints.

An effort has been made to introduce improved farming methods by the establishment of demonstration stations in thickly settled communities, where considerable numbers of interested persons have an opportunity of observing the application of modern systems. This demonstration work was thoroughly organized during the year.

DIVISION OF ANIMAL HUSBANDRY.

This division handles the live stock belonging to the bureau, and purchases all large animals needed by the various branches of the government. An order was placed during the year for a considerable addition to the present stock of high-grade swine, stallions, cattle, and goats to be used in improving the respective breeds in the islands. Experiments with the comparative values of different feeds and combinations of feeds for different classes of live stock have been continued. A detailed discussion of the results may be found in the report of the director.

VETERINARY DIVISION.

During the year the staff of this division has been decreased by 4 veterinarians and 17 American live-stock inspectors, and increased by 14 Filipino inspectors. At the beginning of the year rinderpest was prevalent both in the Visayas and on the island of Luzon. Eleven provinces were known to have infection in 35 municipalities. Infection was known to exist in the provinces of Surigao, Capiz, and Iloilo, while on Luzon the disease was confined, so far as was known, to the provinces of Bulacan, Isabel, Laguna, Mountain, Pampanga, Pangasinan, Rizal, and Zambales. Of these, Bulacan, Capiz, Iloilo, Laguna, Mountain, Rizal, and Surigao were cleaned during the year, but to offset this, the provinces of Cagayan, Ilocos Norte, Ilocos Sur, and La Union, were known to be infected on June 30, 1913. During the year 4,731 cases of rinderpest with 2,787 deaths were reported. Seventy-two per cent of the new cases and 70 per cent of the deaths occurred in three provinces, namely, Pampanga, 1,785 new cases and 1,335 deaths; Zambales, 1,212 cases and 449 deaths; and La Union, 438 cases and 184 deaths. At the time of the greatest scourge of the disease in these three provinces, there was not the degree of cooperation between the bureau of agriculture and the local officials which

is necessary to combat it successfully. It is believed that this condition has been remedied in all these provinces. In Zambales and La Union, in fact, the disease is almost wiped out.

Cases of other forms of sickness—among them foot-and-mouth disease, surra, and glanders—were met with but occasioned no great loss. The Philippine Scouts have continued to render services of the same high efficiency, and the Philippine Constabulary has cooperated with the veterinarians in every possible way.

Much research work in both rinderpest and surra was done during the year. The fly which disseminates surra was discovered, and experiments looking to the prevention of the disease may now be more effectively carried on.

DIVISION OF AGRONOMY.

The work of this division included investigation of rice, corn, sugar cane, forage, and cover crops. Many varieties of rice have been discarded during the various tests which have been made during the past five years, and now the bureau has only 128 varieties of lowland rice, of which 90 have given an average yield of more than 2,000 kilos per hectare for two or more years. Twelve of the better varieties have been distributed to planters for the purpose of making tests under field conditions, and 247 varieties of upland rice are being tested at La Carlota, Occidental Negros.

Many foreign varieties of corn have been tested, but none has been found which promises to give better results than some of the native varieties. It is possible in some cases to obtain heavier yields with varieties of "dent," but this corn is quickly destroyed by weevils, and therefore must be consumed immediately after the harvest.

Sugar production on a commercial scale has been discontinued at La Carlota, but experimental work with canes is being continued. The principal operations of this station, however, were with fiber crops.

DIVISION OF HORTICULTURE.

The work of this division includes the supervision of the Singalong Experiment Station, the Lamao Experiment Station, and the tobacco station at Ilagan. It also includes seed and plant introduction and distribution, the locust campaign, and other entomological work, and all horticultural investigations.

Singalong Experiment Station.—About 2,000 tests of more than 1,000 varieties of vegetables and plants were made at this station during the year. Not only were vegetable tests made, but it has been found economical to carry on a number of experiments with ornamental plants and flowers, and interesting results have been obtained. Several new first-class varieties of cannas, dahlias, and other bulbs suited to the climate have been added to the Philippine flora. The expense of propagating these plants was small, and they will be distributed to various government institutions during the year. At this station also seeds and plants for the Lamao Experiment Station have been germinated and grown. During the year about 200,000 seedlings were raised, and some 1,700 varieties of seeds and plants are now in the process of propagation. It is estimated that the total

number of roots, bulbs, cuttings, and living plants handled and distributed during the fiscal year from the Singalong propagating sheds is upward of 400,000. A temporary shed has been provided for the rapidly growing orchid collection, and this shed now contains more than 600 plants, which are to be used as exhibits in 1914. On the whole, the work at this station has been very successful and its cost remarkably low.

Lamiao Experiment Station.—The propagation work at this station has been largely in citrus fruits, and every effort is being made to test, propagate, and distribute throughout the islands a great number of the best citrus fruits of the world. In addition to many varieties native to the Philippine Islands, the standard varieties of America and India are now under observation, and most of the European varieties will soon be received and planted. It appears that quite 75 per cent of the foreign varieties of oranges, lemons, limes, and pomelos will prove adaptable to climatic conditions here. There is also a pineapple collection containing large numbers of various kinds ready for distribution. Work is also being done with avocados, mangos, papayas, vanillas, and numerous other plants.

Seed and plant distribution.—About three times as many varieties of seeds were handled as during the previous year, and the quantity nearly doubled. Over 1,600 collections were distributed to provincial governors, supervising teachers, and large planters who collaborate with this division. These special collections have contained from 50 packages to 25 kilos or more of seed in bulk, and it is believed that this class of distribution has been more beneficial to agriculture in the Philippines than all others, for the reason that the recipients possess a sufficient degree of intelligence or are favorably situated for properly developing the crop. About 12,000 collections have also been mailed from the office to various parties upon request. Most of these were seeds of vegetables which had been tested and found adapted to local conditions. A large number of collections were also called for at the office itself. The provinces which requested the largest number of collections were Pangasinan (2,022), Ambos Camarines (1,331), Bulacan (1,270), and La Union (1,138). Germinating tests are made before the seeds are distributed, and lots which do not show more than 75 per cent of germination are not distributed.

FIBER DIVISION.

The activities of this division were of two kinds—investigation in the field and experiments at stations. The work of the previous year was continued and some new experiments with other varieties begun. During the coming year the experiments should reach a stage where the distinguishing characteristics of various species of abacá may be determined. There remains a great deal to be done, not only to determine the best species of fiber, but to secure the adoption of the best cultural methods. Unfortunately, the average quality of abacá produced remains low and quite unsatisfactory. Only 10 per cent of the exportation of the past year can be classed above good current, while 72 per cent is below that grade. The results of tests made by this division indicate that 60 per cent should be above good current and not to exceed 15 per cent below. This shows how large an opportunity there is for improvement in the quality of fiber produced.

Recently more interest has been shown in the kapok industry than formerly, and several plantations have been established in central Luzon. The demand for this fiber has definitely increased, and there is opportunity for a large development of the industry.

Much work has also been done with cottons, maguey, and other fibers. This division is of increasing value to the people.

DEMONSTRATION AND EXTENSION DIVISION.

Demonstration stations are now located in Cebu, Bohol, Iloilo, Capiz, Batangas, Surigao, Rizal, Cavite, Laguna, Bulacan, and the Mountain province; and Act No. 2226 passed at the last session of the Philippine Legislature will give a large impetus to this demonstration work. Its two principal features are the demonstration stations themselves and the cooperative demonstration plots which are maintained in the neighborhood of these stations. The people have shown a real interest in this new activity of the bureau of agriculture, and it seems probable that great benefit will come from it.

During the year the bureau requested the Manila Railway Co. to construct a demonstration coach which could be used along its lines on the Island of Luzon. This the company did at its own expense.

The car is 14 meters long and 3 meters wide and is constructed to provide for exhibits of different crops and farm implements and is thoroughly stocked with photographs, maps, and charts illustrative of agriculture. The car, which has already been placed in service, has been visited by large numbers of interested farmers at various railway stations. It is under the charge of employees of the bureau of agriculture, who both lecture on pertinent topics and distribute carefully selected seed.

BUREAU OF SUPPLY.

Regular purchases made by the bureau of supply during the year amounted to ₱7,249,501.18, which were divided as follows:

Purchases of supplies locally (77.90 per cent of the total).....	₱5,647,621.87
Importations from the United States (18.95 per cent of the total).....	1,373,499.43
Importations from all other countries (3.15 per cent of the total).....	228,379.88

Total.....	7,249,501.18
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Sales during the same period amounted to ₱7,001,095.83. This excess of purchases over sales was due principally to extensive buying of lumber for storage in the new lumber sheds on the reclaimed area. Ten of these sheds have been erected, and although they do not furnish protection for all the lumber which the government now has in stock it is believed that ultimately the lumber piles can be reduced to the capacity of these sheds and that they will furnish storage for an adequate stock of properly seasoned lumber.

Purchases made in the local market formed nearly 78 per cent of the total purchases made by the bureau and compare favorably with the 61 per cent of last year. It has always been the policy of the department to purchase through local dealers, except in cases where such a method would be excessively prejudicial to the interests of the government. This policy will be continued, and as the trade of the islands expands and larger and more varied stocks are carried by

local dealers there is no reason why direct importations by the government should not ultimately become almost negligible.

The earnings from surcharges during the past year amounted to ₱595,267.38, while the cost of operation was ₱488,816.50, leaving a gain of ₱106,450.88. The actual net profit of the bureau, however, was only ₱88,907.62 after deterioration of stock had been written off and certain extraordinary charges met. At the close of the year there was on hand merchandise, the cost value of which amounted to ₱2,170,896.78, a decrease of ₱163,979.50 from that on hand at the close of business on June 30, 1912. The operating expenses for the year were 7.73 per cent of the net value of sales, a slight increase over that of last year. This increase was due largely to the decrease in the total amount of business transacted.

Hauling for the bureau is now done exclusively by electric trucks which are charged at the division of cold storage, and which render excellent service at a minimum expense.

It is again recommended that the supplies used by the Government be standardized. Requisitioning offices are at present permitted to ask for any brands of articles or supplies which may appeal to their particular fancy, and the bureau is in consequence compelled to carry an excessively diversified list of small articles and to purchase in small quantities. Some thoroughgoing method of standardization would undoubtedly result in considerable economy to the government and greatly lessen the work of the bureau of supply.

The new buildings for the bureau of supply should be ready for occupancy before the close of this calendar year. After these buildings had been practically completed it was found that the filled-in land upon which they are erected would not, without piling, support the load which it would be called upon to carry after the bureau had moved in. In consequence, extensive piling and a new floor were necessary, and this work is just now being completed.

DIVISION OF COLD STORAGE.

Following will be found a statement of the receipts and expenditures.

The receipts were derived from sources as follows:

Cold storage.....	₱228,027.31
Ice.....	323,549.13
Distilled water.....	51,156.09
Electric current.....	15,226.67
Transportation.....	45.00
Lorcha rent.....	2,543.92
Miscellaneous.....	8,115.46
Sales of equipment.....	3,148.80
Sales of supplies.....	1,093.81
Sales construction account.....	757.72
Total receipts.....	₱633,663.91

EXPENDITURES.

Bills payable, previous fiscal year.....	33,717.36
Permanent improvements and equipment.....	82,411.94
Reconstruction of buildings.....	137,639.68
Operating expenses and supplies.....	342,735.31
Total payments.....	596,504.29
Excess of receipts over expenditures.....	37,159.62

Upon examination it was found that parts of the building in which the division of cold storage is housed had so deteriorated that there was danger of collapse. In consequence, the plant is being reconstructed as rapidly as possible, and within a few months the entire work should be finished. This work has been paid for out of the receipts of the plant and has been carried on without greatly interfering with its ordinary business. When finished, the plant should be in better condition than at the time it was built.

BUREAU OF PRISONS.

On June 30, 1913, the prison population of the Philippine Islands, exclusive of municipal prisoners, numbered 7,250 souls, or 340 more than on the corresponding date last year. Of this number 2,877 were in Bilibid Prison, 1,167 were in the Iwahig Penal Colony, 1,116 at Corregidor, 40 at Baguio, 42 at various constabulary stations, 67 at the San Lazaro Hospital, 12 at the Hospicio de San José, 35 at the Lolomboy Industrial School for Boys, 25 at the Luneta police station, 10 insular prisoners in various provinces, and 1,859 were confined in provincial jails. Comparison of the crimes for which prisoners were sentenced to Bilibid last year with those for the year preceding is interesting. During the last fiscal year there were 191 commitments for adultery, as compared with 54 for the year before, an increase of 120 per cent. Five persons were committed for brigandage as compared with 23 for the preceding year, and 199 for embezzlement as compared with 185 during the preceding year. The number of commitments for robbery increased 25 per cent, and for theft, 7 per cent. There was an increase of 30 per cent in the number of commitments for vagrancy, and a decrease of 30 per cent in those for robbery by band.

At the end of the year the prisoners were graded as follows: 1,830 first class, 719 second class, and 167 third class, the last being less than 6 per cent of the entire population of Bilibid.

COST OF MAINTENANCE.

The daily net cost of maintenance per capita at Bilibid prison was ₱0.30268 as compared with ₱0.306 for the preceding year. The total net cost of maintenance per capita at the Iwahig Penal Colony was ₱0.36739 as compared with ₱0.369 for the preceding year. The total average per capita cost for prisoners during the fiscal year has been as follows:

	American and European.	Filipino and Asiatic.
Bilibid.....	₱0.34+	₱0.15+
Bilibid Hospital.....	.27+	.27+
Iwahig Penal Colony.....		.17+
Corregidor.....		.13+
Baguio and other stations.....		.15+

Which is a per capita increase over the preceding year of ₱0.01+. This increase is accounted for by the large amount of rice which it was necessary to ship to the Iwahig Penal Colony because of the drought, and the high market price of rice last year.

BILIBID PRISON.

Industrial division.—The output of the industrial division for the year was ₱319,005.19—an increase over the preceding year of ₱12,893.42—with a net profit of ₱47,638.07. In addition there was paid to the prison for prison labor ₱41,100.15, which made the net profit to the bureau of prisons from payments to the industrial division ₱88,738.22.

Education.—School work has been continued in the prison, one hour daily being given to each pupil, with very satisfactory results. Many prisoners who entered the institution unable to speak English have completed the regular school work up to the fourth grade and are able to speak, write, and read English in an intelligent manner. There was a total enrollment in the schools of 1,667.

Religious services.—Religious services are conducted every Sunday by two regular chaplains and often by others representing the various religious denominations of the city of Manila.

Health and sanitation.—In general, sanitation has been improved by filling in the low land on the east side of the prison, and health conditions have been good. The annual death rate from all causes was 29.88, but of this number 22.82 were from tuberculosis. A very large percentage of those committed to the prison come in an advanced stage of this disease. The hospital furnishes splendid opportunities for open-air treatment but in many cases the disease is too advanced to permit of recovery.

PROVINCIAL PRISONS.

It is again recommended that prison wardens be required to take a course of instruction at Bilibid Prison. There is, however, a general improvement, both in the character and management of provincial prisons. Interest in the betterment of local prisons has been awakened in most provinces, and many provincial governors have shown a desire to improve prison conditions. Regular monthly inspections which for the last two years have been made by constabulary officers have had an especial influence in turning attention in this direction.

IWAHIG PENAL COLONY.

A nearly complete change in the management and personnel of the penal colony was made during the past year. Capt. Charles L. Pitney, of the Philippine Scouts, was appointed superintendent, and Lieut. John W. Inglesby, of the Philippine Constabulary, assistant superintendent. Under their management very many improvements have been made in the colony. One hundred and eighty-five hectares of land have been cleared and placed under irrigation; over 6,000 coconut trees planted; and 555,000 bricks manufactured during the year. The ice plant with cold storage facilities has been completed, two new brigade buildings constructed, and a substantial sea-going launch purchased. One residence, an office building, a bodega, and seven new bridges have been built. A new fishing station has been established, the catch at which during the year was valued at ₱8,368.65.

The population of the colony on June 30, 1913, was 1,263, of whom 1,078 were penal colonists; 81 free and unconditionally pardoned

colonists; 72 members of colonists' families; 18 officers and employees; and 14 members of officers' and employees' families.

The settlers division.—That is the division in which are placed those colonists who are given land to clear—has 157 hectares under cultivation, and is beginning to produce a considerable amount of crops.

It is hoped during the next year that permanent buildings may be begun on the new site, which is higher and better situated than that in which the temporary buildings now stand. A sanitary water system is now in contemplation, and it is proposed to clear a large amount of land, with a view to making the colony more nearly self-supporting.

HABITUAL CRIMINALS.

For four successive years this department has recommended the passage of a habitual criminal act. Such an act has several times been passed by one branch of the Philippine Legislature, but has failed of passage in the other. Attention is again earnestly directed to this important question. Such an act is in harmony with modern penology. We always have a considerable number of prisoners in Bilibid who have been sent there many times for trivial offenses. Many of them have been committed more than 20 and some at least 30 times since American occupation, for crimes which can only be punished by from 1 to 6 months of imprisonment. Immediately upon the release of these prisoners, they reengage in criminal practices. Most of the petty pilfering and porch climbing in the city of Manila is committed by criminals of this class. There is every reason why they should not be allowed to prey upon society, and the safety of the community is constantly menaced by their being at large. I desire to recommend again as earnestly as I may the passage of a law that will enable the courts to commit habitual criminals for a considerable time. The failure to provide such a law indicates a disregard of the public welfare, and is in no sense showing kindness to the criminal himself.

BUREAU OF PRINTING.

In touching upon the work of the bureau of printing for the fiscal year 1913 it is desired to call particular attention to the vocational training which it gives to a large number of Filipino boys and young men who are enrolled as apprentices and given opportunities to become skilled workmen in a trade of prime importance. From the point of view of the essential object of this government this is perhaps the most valuable work done by the bureau.

The product of the bureau for the year amounted to ₱928,075.56, and the cost of operation ₱845,072.50. The difference was deducted from the regular monthly bills of the various bureaus and offices. The outstanding obligations amounted to ₱676,601.36, while the property on hand, as shown by an inventory, was ₱952,096.79, exclusive of the official gazettes and public documents kept for sale, the selling price of which amounted to ₱148,572.45.

The number of orders executed during the year was 11,023. Of these, 7,292 were for the insular government, including the city of Baguio; 829 for the city of Manila; and 520 for the Federal Government and others.

A résumé of the personnel of the bureau may be of interest. There were on June 30, 1913, 496 employees on the rolls. Of these, 464 were Filipinos, 30 Americans, and 2 East Indians. Of the Filipino employees, 113 were craftsmen; 50 junior craftsmen; 115 apprentices; 1 machinist; 1 junior machinist; 2 press feeders; 5 carpenters; 2 painters; 35 clerks; and the remainder may be classified as laborers, messengers, and cocheros. It will be noted, therefore, that a large proportion of these employees are occupying important positions, requiring accurate knowledge of the various branches of the trade.

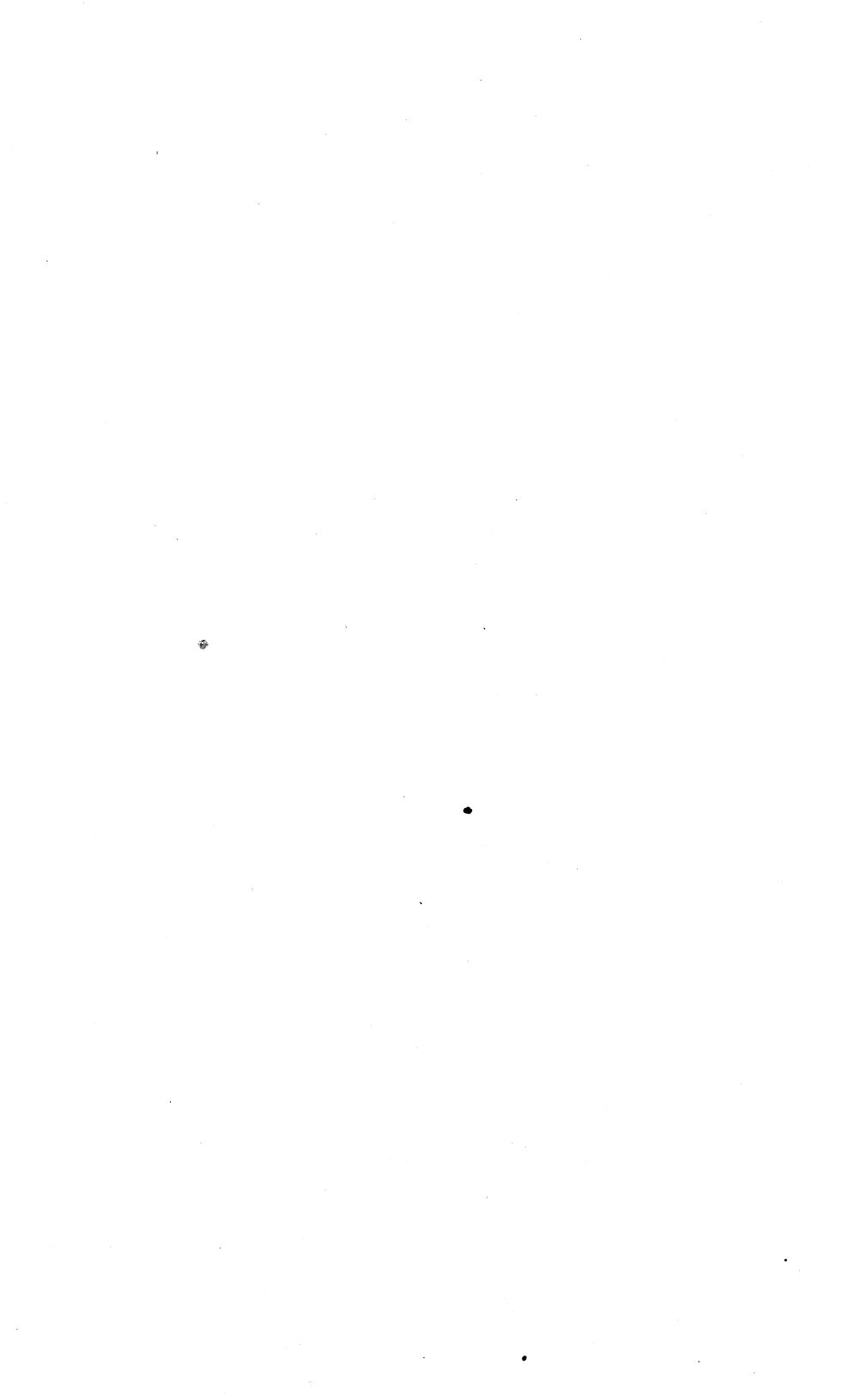
The increase in the business of the bureau of printing during the last 10 years can perhaps be best illustrated by a comparison of the stock of various kinds used in the year 1903 and in the year 1913. In 1903 there were used 2,192 reams of book paper; in 1913, 5,478 reams. In 1903 there were used 3,006 reams of writing paper; in 1913, 8,501 reams. In 1903 there were used 48,530 sheets of cardboard and bristol board, and in 1913, 240,592 sheets. In 1903, 192,000 envelopes were used, while in 1913 the number had risen to 5,101,461. Yet the work has been carried on with no material increase of floor space. The building of the bureau of printing is now crowded beyond the point where work can be economically done, and it is, besides, so loaded with heavy machinery that the danger point has almost been reached. It is absolutely necessary to secure more commodious quarters if the work of the bureau is to be properly performed. The quarters are cramped, much overtime and night work is required, and the situation hinders economical production, and is detrimental to the health and efficiency of the employees. I earnestly recommend that a more suitable building be provided.

For detailed statements covering the operation of the several bureaus in the department, I refer you to the reports of the respective bureau chiefs which are submitted herewith.

Very respectfully,

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NEWTON W. GILBERT,
Secretary of Public Instruction.

To the PHILIPPINE COMMISSION.



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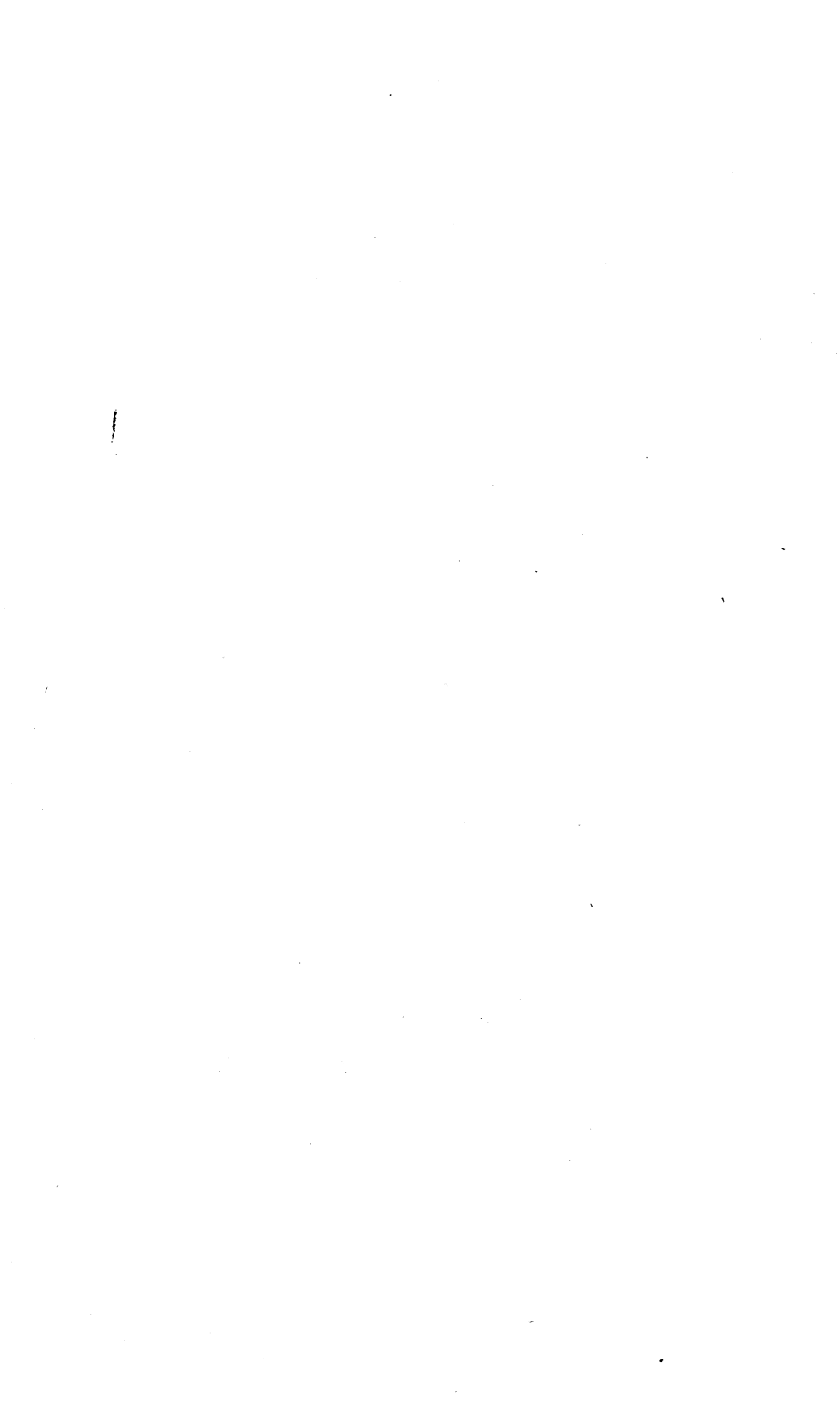
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